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ORIGINAL DEPARTMENT.

SPECIAL ARTICLE.

THE CHOLERA AT THE PORT OF NEW YORK.

The arrival of the steamship "Alesia" in the port of New York a few days ago with Asiatic cholera on board, has occasioned considerable alarm on account of the possibility of the disease spreading in this country, although late in the season. Past experience with epidemics of this disease has shown that although a temperature as low as the freezing point, even for a few hours at a time, such as occurs during nights of frost, is usually sufficient to arrest the spread of the epidemic under ordinary circumstances, yet the disease has been known to pass through the winter under the intense cold of northern Russia; and there are quite numerous instances of epidemics lingering through the winter in other countries where the cold is far less intense. The possibility of the spread of an epidemic from the few cases of cholera kept at the New York quarantine station therefore offers sufficient cause for the interest which has been taken, not only by the general public in and around New York, but also by the medical profession throughout the country, particularly by those members whose official positions or lines of study naturally cause them to give particular attention to any epidemic disease which may seriously threaten the public health. It is in recognition of this fact that the following brief account of Dr. E. O. Shakespeare's recent visit to the New York quarantine station is given to the readers of the REPORTER.

The object of Dr. Shakespeare's visit was three-fold: First, to learn whether, or not, the disease was genuine Asiatic cholera, as it had been reported to be; second, whether the comma-bacillus of Koch was to be found in the dejecta or intestinal contents; third, what measures were being enforced to prevent the spread of the disease beyond quarantine. Through the courtesy of Dr. W. H. Smith, the health officer of the port of New York, Dr. Shakespeare was permitted to visit that station, and allowed to make any observations which he desired.

The steamer "Alesia," with a French captain and crew, sailed from the port of Marseilles on the 30th of August last, laden mainly with baled wool, for the port of New York. On the 2nd of September the steamer touched at the port of Naples for the purpose of taking aboard some 550 or 600 Italian and Sicilian emigrants, who were booked as steerage passengers. The next day, the 3rd, the steamer not having taken aboard any provisions, water or merchandise at Naples, again put to sea with the intention, on the part of the captain, of stopping at the port of Palermo, on the island of Sicily, for the purpose of taking aboard some forty additional steerage passengers; but, at the earnest remonstrance of the ship's surgeon, an apparently intelligent physician of Marseilles, based upon the danger of taking cholera aboard, the disease being then very widespread throughout that island, the captain abandoned his original intention, and pro-

ceeded direct for New York. There is good reason to believe that there was no cholera in Marseilles at the time or previous to the departure of the vessel; but the American Consul at the port of Naples, Mr. Edward Camphausen, inserted a note in the clearance bill of health, stating that cholera was then prevalent in and around the City of Naples, and had been so for the preceding five weeks. Many of the emigrants taken aboard at Naples were taken from the Island of Sicily, but they had remained for some time in the city of Naples before sailing, and in view of all the circumstances, it is impossible at this time to say whether the cholera, which subsequently broke out on the steamer, was originally brought from Sicily or from the city and suburbs of Naples itself. As has been stated, the steamer left the port of Naples, bound for New York, on the 3rd of September. The first case of cholera recorded in the notes of the ship's surgeon, under that name, occurred on the 12th, that is, nine days out from Naples. Subsequently to that date new cases were constantly developing during the remainder of the voyage, and, as is now well-known, the ship reached the quarantine station in New York flying the yellow quarantine flag, and with cholera still on board.

The first subject of investigation to which Dr. Shakespeare directed his attention was the record which the ship's surgeon had kept of the health of the passengers and crew during the whole of the voyage. It was found that upon the fifth of September, two days out from Naples, a child was seized with symptoms, which, according to the recorded notes, and in view of the subsequent outbreak of cholera, may very easily be taken to have been a mild case of cholera, unrecognized by the ship's surgeon. Again, on the tenth of September, that is five days later, there is a record of another attack, this time the ship's baker himself, which gives strong ground for the belief that this patient was really suffering with decided symptoms of cholera, although the surgeon failed to consider it such, and noted the attack as "caused by fright or violent anger." The symptoms recorded in this case are mainly cerebral congestion, great oppression and difficulty in breathing, violent vomiting, some purging and cramps. Thus it appears to be extremely doubtful that the first case of cholera aboard this ship really occurred on the twelfth of September, nine days after leaving port, and consequently after a period of incubation lasting that length of time. Indeed it is highly probable, in view of all the facts and of the usual extremely short period of incubation of cholera, that the disease made its appearance as early as the second day of the voyage, and continued its presence until New York quarantine was reached, although it was not recognized until the twelfth of September.

At the time of Dr. Shakespeare's visit to the ship the process of disinfection and fumigation was going on. The steerage, the saloon deck and the forecastle had already been cleaned up and thoroughly washed with a solution of corrosive sublimate —one part to four thousand; and the cargo was being exposed to the action of the fumes of burning sulphur placed in a large metallic pot in the lower hold, the upper hatches of the main deck being battened down, and the hatches of the intervening decks off. In addition to this the Health officer was devising some means of subjecting the interior of the vessel to the action of super-heated steam.

The emigrants had previously been removed to Hoffman Island, a small island in the lower New York Bay, five miles from the boarding station, which latter is located in the Narrows at the entrance of New York harbor. The crew and three of the saloon passengers remained upon the steamer. There is another artificial island within a mile of Hoffman Island, devoted to the uses of a hospital. This hospital is under the immediate direction of the resident superintendent, who is not a medical man, and the patients kept there are attended to by a young man who has attended two courses of medical lectures, but has not received his diploma as a doctor of medicine. There is no resident physician upon this island, which is known as Swinbourne Island.

Hoffman Island is used as a station of observation, is about four acres in area, and has upon it three large, substantial buildings, one of these devoted to heating, cooking and washing, another building used for storage and disinfection of baggage, and the last, a large two-story building, intended for the use of people under observation. There is no resident physician stationed at this island, and the 550 or 600 immigrants kept under observation at this time are controlled and watched day and night by some five or six hired attendants of the class of laborers and watchmen.

The mode of disinfecting the baggage was as follows: There are two disinfecting rooms 15x30 feet, with one or more windows in the corners of the large store-house above mentioned. These rooms are separated from the rest of the building by a board partition,

which is nearly air tight. The baggage is unpacked, articles are separated and hung up on lines which cross the rooms in various directions. These articles are exposed to the fumes of burning sulphur, in such a way that the sulphurous acid gas comes in direct contact with the whole texture, and thus thoroug ly destroys any living substances it may contain.

The 550 or 600 immigrants upon Hoffman Island are watched by the hired assistants already mentioned, and cases of diarrhœa, or if genuine cholera developed during the course of the twenty-four hours among them, are reported to the Health Officer at the time of his daily or semi-daily visits to this island. They are then removed to the hospital on Swinbourne Island, and placed under the treatment of the medical student above mentioned. The medical treatment of these patients, as well as that of those who may develop symptoms of illness on Hoffman Island, of course, is under the direction of the Health Officer, who is a distinguished, thoroughly capable and wide-awake physician.

At the time of his visit to Swinbourne Island, Dr. Shakespeare obtained cultures and made examinations, in other ways, of the stools of the patients who were suffering with the disease. The symptoms were undoubtedly those of Asiatic cholera, and in some cases of an extremely rapid type. No difficulty was found in isolating the comma-bacillus of Koch, and making pure cultures of it in the usual manner from the stools of the patients.

These observations are entirely in accord with those which Dr. Shakespeare has made concerning the same disease in Italy, Spain and India, and they confirm the opinion which he had already formed, that through the recognition of the comma-bacillus of Koch in the dejecta of suspicious cases, we have a certain and easily applicable means of diagnosing Asiatic cholera from other affections with which it might, under some circumstances, be clinically confounded. The Health Officer seemed to be thoroughly alive and appreciative to the necessity of enforcing the most efficient measures for the destruction of the cholera poison, which may be contained in the soiled clothing and bedding of the passengers and crew, or lurking around the ship. In view of the latenesss of the season, the measures appear to be such as warrant the belief that the disease will not be allowed to escape beyond its present limits. With abundance of funds for the purpose of protection of the public health, we have not the least doubt that the country would be absolutely safe at the present time from an epidemic of cholera. The only source of danger which at present seems to exist is to be charged to the niggardly spirit with which funds for the provision of proper equipment and running of the hospital and other buildings on Hoffman and Swinbourne Islands, has been made by those who are responsible.

COMMUNICATIONS.

TREATMENT OF TYPHO-MALARIAL FEVER.

BY GEO. Y. WOODWARD, M.D., OF LOUISVILLE, MISSISSIPPI.

This form of fever, which has prevailed pretty extensively in this country for the last few years, does not seem to be well understood by the profession; hence there is a great variety in its treatment, with unsatisfactory results in many cases. Although often regarded as typhoid fever, it differs very much from it, and requires a different treatment. In typho-malarial fever, as in typhoid, there is usually debility, nervousness and loss of appetite for a week or more before the disease is developed. The tongue is sometimes thin, and coated brownish, with red tip and edges; sometimes it is large and flabby, with little coating. The bowels are usually constipated, and there is pain and soreness over the liver; sometimes over the bowels also. Most of the cases this spring and summer have commenced with a "cold"—sore throat and more or less cough. The temperature ranges from 100° to 105°, and is usually lowest in the mornings. The bowels are generally harder to move than in typhoid fever, and diarrhœa is very seldom present; hence less care is necessary in using purgatives.

I treat the disease as follows: I give calomel and Dover's powder, two grains each, repeated every two hours until three doses are taken. This is followed in six or eight hours with a dose of castor oil or some other mild cathartic. I then give about 10 grains of sulphate of quinine every two or three hours until three doses are taken, each day for the first four or five days. I also use tincture of gelsemium in doses of from 10 to 18 drops every two or three hours according to the fever, and sponge the patient

with tepid or cold water two or three times a day.

If this treatment do not abate the disease, I stop the sulphate of quinine and use:

℞ Carbolic acid.....ʒj ℈j
Glycerine.....ʒj
Mix and add:
Iodine.....grs. xx
Iodide of potash.....grs. xxx
Water.....ʒj

Mix. Dose, 10 to 12 drops in water or sweetened water three times a day.

I have great confidence in this mixture in treating typho-malarial fever, as well as typhoid fever. It should be kept up daily until the fever gives way. The temperature should be kept down by bathing and the careful use of tincture of gelsemium. Mild purgatives should be used to regulate the bowels, and it is well to use calomel and Dover's powder in small doses about once a week. Unusual symptoms must be met when they arise, as indicated. I prefer a milk diet. Pure, sweet milk, ice cold, is good. Some butter-milk, when desired, is not objectionable. In the later stages of the fever I add a raw egg to the sweet milk—say to six ounces—and mix well. The patient hardly ever detects the egg in the milk. Other diet can be used, always with care. Soups do very well, but are more likely to disagree with the patient and to increase the fever.

If there is much liver trouble, I apply a blister; if soreness over the bowels, I have them rubbed several times a day with some stimulating liniment.

The thermometer is necessary in the proper management of this fever, as the skin is often moist and cool when the fever is high. Sometimes profuse perspiration is present; hence the need of a thermometer.

When convalescence begins, care should be used not to expose the patient to a draught, especially if the weather is cool or damp; otherwise a dangerous sore throat may be induced. I have known two young ladies to lose their lives from exposure after convalescence had set in.

The above treatment properly carried out will generally cure a patient with typho-malarial fever. The tongue does not generally become dry while using the carbolic acid and iodine mixture; should it do so, spt. turpentine may be used with the mixture. If the tongue gets pale, with a white coat, 15 drops of aromatic sulphuric acid may be given two or three times a day.

SULPHATE OF MAGNESIA IN ABDOMINAL DISTENSION AND PERITONITIS AFTER LAPAROTOMY.

BY CHARLES B. PENROSE, PH.D., M.D.,
Surgeon to Out-patient Department of the Pennsylvania Hospital.

The administration of a purgative for the relief of the abdominal distension and peritonitis which sometimes follow laparotomy, was first advised by Lawson Tait. The treatment is also advocated by Greig Smith and by other surgeons abroad and in this country. There is at the same time a strong tendency among many physicians to adhere to the routine practice of administering large doses of opium as soon as any symptoms of peritonitis are manifest.

The abdominal distension which follows laparotomy is due to paralysis of the muscular coat of the intestine. In the simplest cases this distension lasts but a few days, and is caused by the diminished tonicity of the intestine muscles, from exposure, manipulation or relief from intra-abdominal pressure. In other cases, it may precede or accompany peritonitis, and the muscular paralysis is caused by the inflammation of the serous covering of the intestine.

The results of abdominal surgery show that it is not necessary to paralyze the intestinal track further by the administration of opium. The danger of moving the bowels after exposure of the peritoneum has been much exaggerated. It seems probable that the peritoneum is subjected to, at least as much irritation from the tension and movement caused by the distending gas, as it would be from any peristaltic motion of the muscles of the intestines.

A free, watery purge encourages peristalsis and the escape of gas. It depletes congested peritoneal vessels, and probably drains off, through the intestines, serum which was contained in the peritoneal cavity. The diminution in the quantity of the serum discharged from an abdominal drainage tube is often very marked after the administration of a free purge.

The choice of the purgative depends somewhat upon the nature of the case. When there is excessive vomiting it may be necessary to employ small, frequently repeated doses of calomel. In most instances, however, there is no better purgative than sulphate of magnesia. It produces large serous evacuations and no intestinal irritation.

I have used sulphate of magnesia in several cases of abdominal distension and peritonitis following laparotomy, and in no case have I found it necessary to give opium.

The following case illustrates the value of this plan of treatment:

A woman, upon whom I operated for double pyosalpinx, developed symptoms of peritonitis on the second day after the operation. She had a chill, followed by great abdominal pain and distension; her pulse was 110, her temperature 99.5°. Her knees were drawn up, and the jarring, caused by motion in the room, provoked exclamations of pain. An ounce of sulphate of magnesia was administered in one dose. This produced four large serous evacuations during the next twelve hours. The drainage tube then became dry, and all alarming symptoms disappeared.

Occasionally the intestinal paralysis is too great to be overcome so quickly. In another case operated upon for the removal of a large dermoid cyst of the ovary, peritonitis appeared upon the third day after operation. The discharge from the abdominal drainage tube became very profuse. The abdomen was much distended and tender. The pulse ranged from 120 to 140; the temperature from 97.5° to 100.5°. The respirations were over 40 per minute. The tongue was coated, and for two days there was hiccough and bilious vomiting. The venous congestion and abdominal pressure were so great as to cause large external hemorrhoids.

Large doses of sulphate of magnesia and frequent turpentine enemata were administered for several days. The enemata were retained for only a few minutes, and their rejection was followed by the escape of a small quantity of flatus. On the eighth day the bowels began to act. For 24 hours there was profuse watery diarrhœa. The discharge from the drainage tube ceased, the tympany diminished, and in a few days the hemorrhoids had disappeared. The abdominal distension decreased but slowly; and continued, to a slight extent, after the patient was able to leave her bed.

When there is simple abdominal distension gradually increasing and unaccompanied by other disturbance, small, frequently repeated doses of sulphate of magnesia produce speedy relief. The cases, however, in which the effect of sulphate of magnesia is most marked, are those in which it is administered at the onset of dangerous symptoms. When, on the second or third day after operation, or in some cases even later, alarming abdominal symptoms appear, the immediate administration of a dose of one ounce of sulphate of magnesia will, in most cases, save the patient from further danger.

PUERPERAL MASTITIS.

BY A. E. CALKINS, S. B., M. D., BATH, MICH.

Since the discovery by Pasteur of the lactic acid ferment, all varieties of epidemic and contagious diseases have been carefully tested by the germ theory, in a more or less successful search for their positive etiology. In this way pelvic inflammations, puerperal complications, erysipelas, phlegmasia dolens and even scarlatina have been proved members of the same family, springing from a common parent, with a tendency to influence and modify each other. It is a species of correlation of diseases. The great advance made in pathology and its practical application in treatment since the writings of Sir James Y. Simpson, upon "The Analogy Existing Between Surgical and Puerperal Fevers," has never been surpassed in the history of medical science. The birth of the germ theory in 1857, with its unprecedented progress since, has demonstrated that these diseases are not simply analogous, but identical.

Mastitis occurring during the puerperal period, influenced by the same conditions and subject to the same causes, necessarily invited the scrutiny of bacteriologists and pathologists to its phenomena and causes. So very thorough has this investigation been conducted that we have a positive knowledge that certain forms of mastitis are produced by micro-organisms closely connected in relationship with those causing other puerperal inflammations.

Puerperal mastitis is confined by its definition to any inflammation of the functionally active mammary gland, occurring during and dependent on the puerperal state. When impregnation has taken place, reflex nervous excitation causes an increase in the mammary blood supply, cell and tissue organization and development becomes active; there is a physiological intumescence of the whole organ, fitting it later on, for the secretion of milk. The accumulation of this new secretion may extend and irritate the freshly formed tissues, and set up a pathological action involving one or more lobes. This stimulation will increase the quantity of milk secreted, bulging and sometimes bursting the fragile glandular vesicles, modifying their nutrition and stopping the secretion. The lining epithelial cells will be thrown off and destroyed,

exudations will be poured out, and may pass through the ruptured and weakened walls into the connective tissue. These exudations may retrograde and form abscesses, or be re-absorbed. It is very seldom that pus is formed in non-infectious mastitis. There has been no contact with the atmosphere, and there is then only the result of over-excitation, followed by over-secretion.

The most frequent appearance of cases is directly after labor, the majority within two weeks. We get a history of a sharp stinging or pricking sensation in one or both breasts, accompanied or followed by a decided chill, with marked elevation of temperature, and the presence of a very tender, painful and lumpy area in the gland. There is general malaise, with aching pains all over the body, especially located in the back and limbs, with headache and foul tongue, and indigestion. Local examination invariably exposes a fissured or abraded nipple, the key to its positive etiology. The microscope has demonstrated the cause of this form of mastitis to be a micro-organism, with many of the class characteristics of those producing all other puerperal diseases. Its clinical history fairly intimates this relationship. There is the same abruptness of onset, decided chill, malaise and rise of body heat, indicating the existence of pyæmia. The necessary requisites for septicæmia are also all present. The peculiar condition of the fluid constituents of the body after gestation has been completed furnishes one important factor. The circulation is then loaded with broken down and disorganized cells, blood corpuscles, and all the uterine residue resulting from a completed pregnancy. There remains an unsettled equilibrium and relation in the blood circulation and blood constituents. There are innumerable yet physiological alterations in respiration, assimilation and excretion, incident to the establishment of lactation. The presence of bacteria, in the lying-in apartments, clothing, etc., of the patient, has been frequently demonstrated. The lochial discharges are an unfailing storehouse of these micro-organisms, so that it is plainly evident that any wound occurring during the puerperal period is liable to infection by pus-producing organisms through the medium of the air and by direct inoculation from the lochia.

In infectious or phlegmonous inflammation of the breast, there invariably exists some fissure, contusion or wound, usually in the immediate vicinity of the nipple, making free communication between the atmosphere and the connective tissue. This will terminate in shallow and deep-seated inflammations of all forms and kinds, as different tissues and organisms are united.

The bacteria accumulate, and, coming in contact with the secretion in the milk ducts, form colonies, stopping up the mouths of the ducts and distending them with milk. Lactic fermentation begins and their walls become congested and inflamed. Before the epithelium disintegrates, pus forms in contact with it and contaminates a more or less large portion of the gland. An interesting inquiry may be instituted as to whether infectious mastitis ever occurs from the direct communication between the gland and the septic poison in the uterus by means of the absorbents and the circulation. We have no reason to doubt its occurrence in phlegmasia dolens and general phlebitis. We get inflammation and induration of the inguinal glands in specific diseases, of the lymphatics in epithelioma, and metastisis in mumps. There are cases of mastitis that are explainable only by supposing some such absorption.

That it is a communicable disease I have no reason to question. An evidence of phlegmonous mastitis being identical with other varieties of puerperal sepsis is found in the fact that these abrasions of the nipple frequently act as the starting point in phlegmonous erysipelas.

About the only disease with which it can be confounded is a furuncle situated upon the breast, and particularly when it forms under the skin and close to the nipple. The boil matures and opens upon the surface, never into the gland tissue.

The treatment will be regulated by the cause of the complaint. If it be non-infectious in character, resulting from excessive secretion of milk, rest, support and the local application of belladonna and camphor will be beneficial. The application of cold in the form of ice-bags and evaporating mixtures meet the indication admirably. Dr. Hiram Corson considers them as almost infallible in aborting suppuration. The older treatment of drawing off the milk, either by the child or artifically, cannot be too strongly condemned. It further irritates the gland, increases its secretions, and in every way makes a bad matter worse. Lowered blood pressure decreases the secretions, and belladonna, aconite and tartar emetic are useful. Pulv. ipecac. co. quiets the pain, the ipecac. counteracting the opium as a cardiac stimulant. Pressure by means of adhesive straps or a light figure-of-eight bandage, lessens

pain, arrests secretion, favors absorption, and, when skilfully applied, gives efficient support.

If the inflammation extends to suppuration, a large poultice should be applied until "pointing" occurs, when the pus must be evacuated by free incision. The wound should then be dressed aseptically.

The management of the phlegmonous variety can be best studied under two heads. First, prophylaxis,—by protectives and antiseptics; and second, remedial,—with evacuants and antiseptics.

Prophylactic. The breasts should be daily exercised, and the epidermis of the nipple toughened by adequate manipulations and local applications, commencing from four to six weeks before the expected time of confinement. Exposing the gland to the air with gentle but firm massage, will develop its structure considerably. If the nipple is small and retracted, it should be pulled out and manipulated until it will protrude sufficiently for the child to seize and nurse.

Fissures may be guarded against by regular bathing with alcohol, bay rum, or holding in solution some astringent, as tannin or subacetate of lead. After parturition, for the first forty-eight hours, or until the maximum quantity of the secretion is reached, the child should be allowed the breast at regular intervals. Once in three hours is sufficiently frequent. During the intervals the nipples should be bathed with the astringent solution, taking express care that they are perfectly cleaned before and after nursing.

Remedial. If any abrasions have occurred, they will demand immediate attention. Two objects are to be aimed at, to destroy all resisting micro-organisms in contact with the wounded surface, and to protect the tissues thus injured from contact, so far as possible, with the atmosphere.

At the first dressing it is advisable to wash the wound with a 1-2000 solution of sublimate, and thoroughly wash the latter off in a few minutes. Then dusting of the part with the subnitrate of bismuth or the oxide of lead is required. The antiseptic need be used but once if the dry dressing be faithfully applied. Boracic acid ground with vaseline makes an elegant dressing to be applied between the nursings, and it has the advantage of acting as a perfect protective to the injured tissues, and is harmless to the child. As the secretions become more profuse, more frequent nursing of the child should be practiced, but at regular hours as near as possible, being careful not to permit an over distension of the milk ducts by the secretion.

When phlegmonous mastitis has so far progressed as to make more or less of the gland hard, tender and painful, free incision is the only method of treatment for relief. It is not necessary then to wait for "pointing" of the abscess, but immediate opening of it is demanded. Then wash the wound thoroughly with the sublimate solution. If abscess cavities have formed, each one must be entered and disinfected. When the gland has become honeycombed with these cavities, make a large incision, and with the finger break down and remove all injured tissue, and bathe every part with the antiseptic. A drainage tube should then be inserted, and the wound dressed with antiseptic precautions, care being taken to afford suitable support for the breast.

The constitutional treatment need not vary much from what it is in other puerperal inflammations. Besides the arterial and nervous stimulants and tonics usually exhibited, the iodide of potassium with quinine and salicylate of sodium are prescribed with great success. Nourishment easily digested and assimilated should be supplied in abundance. Outdoor exercise in suitable weather, with indoor pursuits of a pleasing nature, can not be too freely urged upon those patients that have been too closely confined to city life or household persuits.

—From official statistics it seems that there are 36,512 persons in France holding diplomas that permit them to exercise some branch of the healing art. Of this number, 2188 physicians, 1523 midwives, 762 druggists, and 548 herbalists belong to the department of the Seine, *i. e.*, Paris and its environs. The 2000 odd Paris physicians are divided into two classes, as they are throughout France—namely, those of the first class, or *docteurs en médecine*, and those of the second class, or *officiers de santé*. Both classes practice medicine, about the only difference being that the second-class physicians can not perform any important operation without the aid of a *docteur*. They are known as *médecins*, and they pass a very much easier examination than the *docteurs*. Their diploma only allows of practice in one department, and does not apply to all France, as that of the *docteurs* does. This is the degree usually given to foreign physicians who practice in this country.—*Corresp. N. Y. M. J.*, Aug. 27, 1887.

Society Reports.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, June 6th, 1887.

The President, Wm. T. Belfield, M. D., in the chair.

Dr. Frank Billings exhibited an interesting collection of

Bacterial Cultures,

explained the mode of their culture, and gave the name and description of each bacterium. At the present time, he said, there are three comma bacilli that are well known: the comma bacillus of Asiatic cholera, discovered by Koch, the one discovered by Deneke in old cheese, and the one discovered by Finckler and Prior. Under the microscope these look so much alike that one would not dare to differentiate between them, but their growth in gelatine tubes is so characteristic that one can easily tell the difference. The cholera bacillus grows upon the plate in a peculiar granular colony, which does not make the gelatine fluid so quickly as the bacillus of Finckler and Deneke. Finckler's bacillus liquifies the gelatine from above downward. Those found in old cheese liquify gelatine in the same way, but less quickly; while the cholera bacillus grows in a characteristic funnel-shaped form. It is quite as important to know how to cultivate bacteria and detect the difference in growth, as to know how to differentiate bacteria with the microscope by their form and their reaction to the analine dyes.

Dr. Lester Curtis read a paper on

Calcareous Concretions in the External Ear.

His patient had a painful swelling in the external meatus of the right ear. He considered it an ordinary superficial inflammation of the meatus and directed instillation of a solution of morphine. The pain at once ceased, and in a day or two the swelling subsided, and the doctor supposed that the trouble had resolved, but a little swelling and tenderness remained. In two weeks there was a discharge of a drop of purulent fluid. He paid no more attention to the case until about a month after this, when the patient called and told him that she had that morning picked out several calcareous masses resembling lumps of old lime. On examining the ear I saw a red and indurated place about half way down the meatus, in the upper portion of the posterior wall. In the middle of this spot was a pit about as large as the mass removed, and surrounding the pit a greater or less amount of a white granular substance which grated against the probe and was of stony hardness. I attempted to detach some of it with the sharpened end of the probe, but it was firmly adherent, and appeared to be infiltrated throughout the tissue, and I succeeded in getting away only a few small flakes. Besides this nothing unusual was detected in the ear with the exception of a slight redness of the posterior rim of the drum-head. The hearing was perfect. A slight feeling of irritation was noticed for some weeks, but gradually passed away. At present, so far as I can discover, the ear is quite normal.

Dr. R. Tilley reported a case of

Atheroma of the Left Coronary Artery, Resulting in Aneurism of the Left Ventricle.

The patient was a lawyer, 57 years of age. His previous life had been exemplary. He did not use tobacco in any form, and was temperate and methodical in all his habits. He was corpulent, although when young he was very thin. At the age of 30 he was declared to be dying of consumption. Recovery, however, seems to have occurred without medical assistance.

On the 20th of October, 1885, he was unable to leave the house and had wandering pains, not severe, over the chest extending to the left shoulder and down the left arm, sometimes reaching the wrist. He first called my attention to this, thus: "I don't know whether I want to follow a doctor's directions or not. I get occasionally flying pains over my chest and in my left shoulder, but on walking about a little I can make them disappear." As he always had a marked antipathy to medicine of any kind, and I did not expect greater benefit from anything I could suggest than that which he claimed from exercise, I told him to continue to use the method he had found successful, and report later. At this time I had no conception of the existence in his case of atheromatous coronary arteries, nor did I suspect that the wandering pains were associated with incipient angina pectoris.

About six weeks after the interview above referred to, an acute attack of difficulty of breathing, associated with severe coughing and anxiety of countenance, came on. From this time he did not leave the house except for short walks. The pulse at this time was 120, feeble but regular. Breathing very laborious. He could not lie down on his back or left side, and only for a short time on the right side. Cough was very troublesome.

No special symptoms referring to the alimentary canal were present. On percussion no perceptible enlargement of the heart or liver was detected; nor any definite abnormal sounds. The principal feature which I observed was that of asystole, the ventricles seemed to stop as though shutting down on a pledget of wool. I find that Constantin Paul refers to this symptom very definitely as associated with aneurism, or what he calls false aneurism, of the heart. It certainly struck me as the one striking feature of the case. There was at this time no œdema, no fever, no albumin in the urine.

Drs. H. A. Johnson and R. H. Babcock saw the case, and the former remained as consulting physician to the end. The various heart tonics, such as strychnia, arsenic, and digitalis, were used with no demonstrable effect except that when the digitalis was increased so as to diminish the frequency of the heart's action, the action became so tumultuous and incoördinate that it was deemed best to let it beat at the gait it found most convenient. In about a fortnight after the commencement of the acute attack, anginal pains became more prominent, and atheroma of the coronary arteries was suspected. There was no evidence, however, of any atheroma of any superficial vessels. From this date a bottle containing corbonate of ammonia and camphor became his companion, supplemented with small pellets of 1-100 of a grain of nitro-glycerine. The latter gave more satisfaction than the nitrite of amyl. The anginal pains were not at any time characteristic in severity, but the pallor of countenance and anxious expression were. Later on the feature of asystole was not so well marked. The feet exhibited, on several occasions, a tendency to œdema, but ten days before death it began to increase rapidly, and no remedies were found capable of removing it. The œdema extended gradually to the hips, abdomen, and chest, and about nine weeks after the acute attacks, while walking across the room, he fell dead.

The patient derived marked comfort from gentle exercise in fresh air. When the sidewalks were covered with ice so that he could not possibly walk out of doors, he would wrap up and walk in a room with the windows wide open. Nitro-glycerine and carbonate of ammonia were the only remedies that gave him any appreciable relief.

At the autopsy the heart was found to be somewhat enlarged and all the valves competent. There was little or no atheroma except in the coronary arteries. One of these was almost completely occluded. Just below this atheroma of the left coronary artery, in the wall of the left ventricle near the apex, an aneurism had developed. It was about the size of a large walnut. The wall of the heart in the thinnest part was only two millimètres thick. The aneurismal cavity was filled with blood, part of which showed signs of organization and part signs of disintegration. The clot was evidently formed at two different periods. There were no signs of chronic endocarditis, but some of slight chronic myocarditis.

In the present case, I think that the starting point was the diminished calibre of the left coronary artery, due to its atheromatous condition diminishing the supply of nutriment to the corresponding tissue, and thus producing the extreme thinness of the walls in the part supplied by the artery. The clot of blood was probably the result of the incapacity of the left ventricle to completely contract and expel its contents, and probably occurred in part at the time of his acute sickness, about nine weeks before death.

The presence of this clot of blood fully explained the characteristic sound which I clearly recognized at the first, and which I described as though the ventricle contracted on a pledget of wool.

Dr. Robert H. Babcock, in opening the discussion upon Dr. Tilley's paper, said: It was my good fortune to see the patient to whom Dr. Tilley has referred this evening, and as it was a case of remarkable interest and there are several points illustrative of the peculiar symptoms due to atheroma of the coronary arteries, and also illustrative of the difficulty often of diagnosticating the condition, I would like to refer to them.

The first symptom mentioned by Dr. Tilley as important was that of angina pectoris, and herein this case was peculiar; the pains were flitting and were relieved by gentle exercise. It was wholly characteristic, however, in that the pain extended to the left shoulder and down the left arm. That is the characteristic pain of angina pectoris, although there are so many deviations from it that angina pectoris frequently passes unrecognized by the general practitioner. There is a liability oftentimes to mistake angina pectoris for neuralgia of the stomach. I have under observation a case where the pain has been considered for years gastralgia, but it is without doubt angina pectoris, the arteries are atheromatous and there are characteristic cardiac murmurs which are due to the atheromatous condition of the valves. The pain of angina may sometimes be localized in the wrists. Dr. Sawyer once mentioned

to me a case in which the angina pectoris always manifested itself by a feeling of cord-like constriction about each wrist. There was, however, with this an attendant paleness of the countenance and anxiety, and the patient was obliged to stop in his tracks until the pain had passed. The pain in angina pectoris may extend through to the back, or up into the occiput, at other times into the right shoulder and down the right arm. It may also radiate into the abdomen and down the inside of the thighs. It is usually so severe that the patient has to stand still and wait until the pain passes by. In the case mentioned, the pain was relieved by gentle exercise, and that possibly may throw some light upon the question as to whether angina pectoris is always due to arterial spasm or not. If due to arterial spasm in all cases, it would seem as if any effort of the muscular system would increase the arterial resistance through contraction of the muscles, and thus make a greater demand upon the heart; in which case exercise ought to augment rather than relieve angina pectoris, particularly, if as Leyden is inclined to think, angina pectoris is really due to spasm of the coronary arteries, as well as to a general arterial spasm, resulting in temporary anæmia of the heart muscle. In cases where the paleness of the countenance would seem to confirm this theory, we find that remedies which produce arterial dilatation, such as the nitrite compounds, always give relief. In this case there is an apparent contradiction; not only did exercise afford relief, which would seem to indicate that contraction of the peripheral vessels had nothing to do with the production of the angina, but on the other hand, since nitro-glycerine gave relief, there must have been arterial spasm somewhere.

The diagnosis of this case was not as difficult as it might have been, owing to the peculiarity of the cardiac sounds, although none of us, I think, really expected to find coagulum in the left ventricle filling up the lower third of the cavity. I gave my diagnosis of degeneration of the left ventricle, with atheroma of the coronary arteries, because of the very peculiar character of the sound over the left ventricle, which Dr. Tilley has very aptly described. It was a toneless, muffled sound, as if the heart struck the chest wall through an intervening layer of cotton, while on passing the stethoscope from the left ventricle toward the right ventricle the first sound came out with its usual clearness and more or less of its booming quality, and it was on that that I based my diagnosis. At the post-mortem examination, we found degeneration of both ventricles, more marked in the left than in the right. This case would probably be classified by Leyden as subacute. Leyden has treated this subject more scientifically than any other author, since generally the subject is treated in a desultory way under the various heads of chronic myocarditis, fatty degeneration, aneurism, rupture of the heart, etc.

Leyden would group together all the different expressions of the same pathological condition, that is sclerosis of coronary arteries and all conditions dependent upon that, and he considers it under one head—changes of the heart resulting from the sclerosis of the coronary arteries. He recognizes as acute cases those in which the patient is ill perhaps for a few moments or hours on days. The first symptom is often a sharp attack of angina pectoris, or an attack of great cardiac distress and oppression without positive pain, which Gairdner speaks of as *angina sine dolore*. In these cases the patient frequently first discloses that he has heart disease by falling dead in his tracks. In cases of atheroma of a small branch of the left coronary artery, usually the anterior descending branch, frequently we find a condition closely resembling the hemmorrhagic infarctus, and the heart ruptures at that point; in acute cases death may be due to the rupture, although more often to failure of the heart. Subacute cases, of which this seems to be an example, run their course in a few weeks or months and we find a combination of changes from acute fatty softening to chronic fibroid change, and these patients generally suffer a good deal with angina pectoris. The chronic cases are those that last for years, sometimes fifteen or twenty, and the symptoms are those of cardiac weakness or progressive cardiac failure, and these patients may die suddenly or gradually. In these cases we generally find extensive myo-carditic changes with great thinning of the heart walls.

The treatment of these cases is of course a thing which interests us. It is very unsatisfactory; is merely palliative, and consists chiefly in the severe cases of rest, with cardiac tonics and stimulants. Of especial service in angina pectoris are the nitrite compounds, although Leyden rather protests against the use of nitrite of amyl and nitro-glycerine. He recommends the hypodermic injection of morphine, stimulants, such as ammonia and camphor, hot alcoholic drinks, and heat to extremities. The diagnosis has to be based, in most of these cases,

upon the history and symptoms of progressive or sudden cardiac failure, and if we can find evidence of atheromatous change in the peripheral vessels, the diagnosis is much easier. In auscultating these cases I have frequently found what seemed to me to be a peculiarity of the first sound. The sounds of the heart are nearly always described as free from murmurs, but since the booming quality of the first sound is undoubtedly due to the muscular element, and since the muscle of the heart is degenerated, the first sound takes on rather a short and valvular quality resembling very closely a second sound, so that frequently in these cases the two sounds appear to be two valvular sounds. Although I am not yet prepared to say that one can base a diagnosis upon such a condition as that, yet I am satisfied that in cases where there has been marked atheroma of the radial arteries, with symptoms of heart failure, I have heard just this condition of shortness and valvular quality of the first sound over the left ventricle, particularly when over the right ventricle the sound is more prolonged.

Dr. TILLEY said: I have nothing more to add except that I have known of two or three cases in which, after a hypodermic injection of morphine, in a condition of atheromatous coronary arteries, the patient has passed off very rapidly, and I would be chary of using it, especially if I could obtain a satisfactory result from nitro-glycerine. The form of nitro-glycerine that I used were the elegant tablets of Fraser, so much more convenient than the alcoholic solution.

DR. W. L. AXFORD presented the

Sac of an Aneurism of the Leg,

not very large or elaborate, but interesting because of its locality and the history of the case. Some time last November, a Bohemian came to the South Side Dispensary, having a little lump about as large as a walnut just above the internal malleolus. I could not get his history, as he could not talk English; all that I could make out was that it had been growing there about a year and pained him some. The skin was natural over the growth, which felt soft and fluctuated. I made up my mind that it was some kind of a cyst, and advised him to have it excised. On cutting down upon the growth I found at once that I had made a mistake, from the color of the sac, which was blue. One of my assistants said he saw a little artery spurt. I stitched up the wound and found I had excised the sac of an aneurism. It was about the size of a walnut when fresh. This case was peculiar, as there were none of the usual symptoms of aneurism; it was also peculiar in the large size of the sac compared with the size of the artery. The patient made an uninterrupted recovery.

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Congestive Headaches.

The following is a brief abstract of a paper by Dr. Glasgow, of St. Louis, and of the discussion upon it in the American Laryngological Association, reported in the *N. Y. Medical Journal*, September 3, 1887:

A few years ago I treated these cases with hot alkaline sprays, gently applied, and the use of hot fomentations, combined with the use of the usual constitutional remedies. This mode of treatment has not been altogether satisfactory, and during the past four years I have substituted for it the local abstraction of blood, for which I can allege unqualified success. In many cases there is experienced an immediate relief of the pain, and in all there is a sense of the loosening of the constriction. A simple bleeding may relieve the headache, or it may have to be repeated in a day, a week, or a month. I have seen but few cases which were not permanently relieved by a bleeding repeated from two to six times.

To produce the bleeding no cut is required. The cavernous body is simply pricked, and the blood flows freely until the excessive tension has been reduced; then it ceases. The amount of blood drawn rarely exceeds one ounce; in many cases it is less than this, and in some cases a single drachm of blood removed will give the requisite relief. In cases of excessive congestion the flow will equal several ounces before it ceases, the quantity of blood being dependent upon the distension of the vessels, and this corresponds with the severity of the symptoms. From a normal membrane, or where there is no excessive vascular distension, scarcely a drop of blood will flow from a simple puncture of the membrane such as would produce a free flow in this pathological condition. In cases where the mucous membrane is thickened, a sharper puncture will be necessary to bring blood. A lance-headed probe may be best used in making the puncture, although a

sharp-pointed bistoury, or any pointed instrument, will answer. The probe has the advantage that it does not excite the apprehension of the patients, many of whom become nervous at the sight of a knife, and dread the idea of being cut.

Dr. C. C. Rice, of New York, in discussing this paper, said: The class of cases to which Dr. Glasgow has drawn attention is a very interesting one. My experience with regard to treatment is somewhat different from his, and I do not agree with him as to the pathology. I have seen a great many of these cases, as probably we all have, but they are not as a rule cases in which there is marked hypertrophy of either the anterior or posterior turbinated tissues. I have found that whatever hypertrophy did exist was over the middle turbinated bone, about three quarters of the distance back, and that it pressed against the septum. This condition is present so often that I have come to look for it in this class of cases. There has not been marked congestion or redness, but simply irritative contact, with consequent reflex pains and neuralgias. With regard to treatment, I have used the galvanocautery instead of the knife, and I have not considered it an essential point to draw blood. My results have been good. I will cite an interesting case. A girl twenty years of age, who had suffered from most intense supraorbital neuralgias and a sensitive condition of the nose, came to me a short time ago. For four years she had been obliged to plug her nostrils constantly with cotton so that no air could pass through them. I found nothing but an enlarged middle turbinated bone; there was no congestion. I made four or five punctures with the galvanocautery needle in the turbinated bone, and the woman was cured. I think it is sufficient in the majority of these cases to make marked counter-irritation over the affected part.

Dr. Harrison Allen, of Philadelphia, said: I can confirm Dr. Rice's opinion. While I do not at all doubt Dr. Glasgow's diagnosis, yet it is evident this is a complex subject. It seems there is abundant evidence to show that the trouble came from the turbinated tissue, but all of my cases have been of the kind Dr. Rice has described. I have found that as a rule when the septum is deflected to the left, it is at the lower part; when deflected to the right, it is at the upper part. In the place last named, contact with the middle turbinated is likely to occur. The following case illustrates several facts in this connection. The patient had a complication of disorders. She had ocular and uterine troubles, for which she had been treated by distinguished practitioners. Her headaches were of an exaggerated type. I resorted to repeated venesection of the turbinated tissues, giving temporary relief only. I then made an examination of the nostrils, introduced the finger, and separated the septum and turbinated tissues. There resulted very moderate bleeding. I found something which was very interesting. The lady was only thirty years of age, yet there was complete calcification of the triangular cartilage. The result was that her headache was completely cured. No recurrence took place. The procedure for overcoming the pressure effect may be carried out during the first stage of ether anæsthesia.

Treatment of Sea-Sickness.

Dr. Rebatel points out in the *Lyon Médical*, a method which he has often employed with complete success against sea-sickness. It stops the vomiting and even the nausea which nearly everybody feels on the sea. Patients say that they no longer feel their stomachs. This method consists in the employment of subcutaneous injections of atropine. Small doses are sufficient (gr. 1-50), repeated every seven or eight hours. The author has never noticed the least bad effect, except at times slight dryness of the throat. Sleep can be produced if desired, by adding a small quantity of morphine, but not enough to counterbalance the effect of the atropine. Administration by the stomach gives results that are much less certain.—*Union Médicale du Canada*, September, 1887.

Axillary Adenitis in Tuberculosis of the Lung.

Dr. Sanchez Toledo has devoted his inaugural thesis to this subject, which is absolutely new, Professor Grancher only having called attention to it in his clinic last winter.

The little girl who was the occasion of this study, having had pluerisy, came to the hospital very late in the disease with tuberculosis of the lungs and a large glandular tumor in the right axilla. Enlarged glands could also be found in the subclavicular and submaxillary region of the same side. Prof. Grancher compared with this case two others in which co-existence of tuberculosis of the lung and axillary adenitis had been noticed, and showed how it was natural to see a relation of cause and effect between the pulmonary lesion and the glandular. Therefore, said he, pulmonary tuberculosis can infect the axillary glands through the medium of the pleura, or by direct passage through lymphatics which proceed to

the axilla after traversing the thoracic wall, or through the medium of the subclavicular glands. It has, moreover, a certain importance in some cases with regard to diagnosis and prognosis. A glandular tumor might call attention to a still latent disease of the lung, the existence of which should deter the surgeon from removing the glandular tumor with the view of preventing general infection. "Henceforth," says Mr. Grancher, in closing his clinic, "every time a phthisical patient presents himself, do not fail to examine his axilla. Every time that you find an axillary tumor, do not neglect to auscult the lung."—*Concours Médical*, August 27, 1887.

Diphtheria Circumscripta.

Dr. Guennell writes as follows to the *Brit. M. J.*, August 20, 1887: I have just had under my care a case of sore throat very similar to those described by Mr. Alfred Barrett in the *Journal* of July 23d. A boy, aged 6, was brought to me on July 7th by his mother, who said that he was "out of sorts," but he had not complained to her of anything in particular. He was anæmic, and looked ill. On examining his throat, I found the left tonsil slightly enlarged, but not very congested, and on its surface, just as Mr. Barrett describes, a circumscribed ash-colored slough about the size of a shilling, and deeply imbedded. There was an enlarged gland about the size of a pigeon's egg at the angle of the jaw. The temperature, pulse, and urine were normal, and the only symptom complained of was thirst.

I ordered iron and chlorate of potash internally, and the throat to be painted occasionally with Beaufoy's preparation of chloride of soda, and also a gargle of the latter to be used three times a day. I saw the patient daily, and for the first week there was no change whatever in the appearance of the throat, but some increase in the glands. On the tenth day of the disease, the slough showed some signs of separating, becoming detached at the edges; however, it did not come away until the twelfth day, during the act of gargling, leaving a pit in the tonsil about a third of an inch in depth. Since this time the patient has gone on uninterruptedly well, and there are as yet no symptoms of paralysis.

In looking over various medical works on the subject, I have been unable to find any mention of diphtheria assuming this particular form. From the fact that several of the cases referred to by Mr. Barrett have developed symptoms of paralysis, there can be little doubt that these cases are of a diphtheritic nature.

Simple Ulcer of the Œsophagus With Stricture.

M. Debove had noted in 1883 and 1885 the existence of stricture of the œsophagus in persons unaffected with cancer, syphilis or tumors. He supposed this stricture to be due to cicatrization of simple ulcers of the œsophagus. An autopsy has given him the chance to prove the correctness of his hypothesis. A patient whom Debove had presented in 1885 to the *Société des hôpitaux* died in his service of a perforation of the stomach caused by a simple ulcer. There was also found in the œsophagus, three-quarters of an inch from the cardiac orifice, an annular raised cicatrix, which evidently corresponded to the stricture which Debove had successfully dilated two years before.—*Concours Médical*, August 20th, 1887.

Case of Foreign Body with Calculous Formation in the Female Urethra.

The *Medical Press and Circular*, August 17, 1887, reports the following case from the *Hôpital Bichat*, where the patient was under the care of Dr. Lacorbiere: Adela B., aged 18, was stated to have been gradually losing health and strength. Formerly in the best of health, well formed, and of pleasing appearance, she had become pale and depressed in spirits, sombre and taciturn, and was very emaciated. Not finding anything in the viscera to account for this state of things, the investigation was directed to the reproductive organs, but the patient evinced the greatest objection to any examination. Her scruples were overcome, when the parts were seen to be bathed in a large quantity of thick greenish yellow discharge, with a most offensive odor. Metritis, or at any rate, severe vaginitis was suspected, but beyond the vulva, the organs were perfectly healthy. The orifice of the urethra, however, was unusually large and gaping, and a closer examination showed that the extremely offensive discharge came from it. On dilating the urethra still further, a large foreign body of some sort could be detected, and after long and painful manipulation, a pencil case was withdrawn, covered throughout with a yellow concretion composed of triple phosphate. It was three inches long, and an inch and a-half thick, and weighed several ounces. After its removal the patient rapidly regained weight, and improved materially in health. No explanation could be obtained of its introduction.

A Plant which Destroys our Tasting Capacity for Sweet and Bitter.

The *Wien. Med. Blät.* says that lately a drug, which possesses the property of rendering our sense of taste unsusceptible to sweet and bitter, has aroused the interest of the London medical circles, as it is hoped that by its aid our as yet limited knowledge of the physiology of the sense of taste may be extended, and that it may prove a valuable addition to materia medica. The drug, which reached the manager of the King's gardens at Kew, through the Governor of Madras, Sir Montstuart, Grant Duff, was examined by Professor Thisleton Dyer, etc., and the statements made above corroborated. David Cooper delivered a lecture on the subject lately, at Ootacamund, from which the following is stated: "The drug is obtained from Gymnema Sylvestre (R. Br.), an asclepiadaceous plant, which inhabits the peninsula Deccan, Assam, and the coast of Coromandel; it also occurs on the continent of Africa. It is represented as a strong, woody, climbing plant, with long, thin branches. The leaves are from 1½ to 3 inches long, 1 to 2 inches broad, entire, elliptical to egg shaped, and occasionally cordate at the base, covered with woolly hairs; the upper surface is dark green. The plant is alluded to in the Indian Pharmacopœia. The powdered bark has long been employed by the Hindoos as a remedy for snake-bite. For this purpose the decoction is applied externally. But the most remarkable property was discovered by Captain Edgeworth, who found that after chewing the leaves the tongue lost its capacity of distinguishing the taste of sugar or anything sweet. Powdered sugar had no taste whatever, feeling like so much sand in the mouth. This effect lasted for 24 hours. It is remarkable that the sense of taste for sour, acrid, burning or salt substances is not impaired. When under the effect of this drug, sulphate of quinine tastes like lime. The lecturer found that the peculiar effect did not last 24 hours, but passed off in less than two hours. The chemical analysis showed the drug to contain two resins, of which one is soluble in alcohol; the other, which is present in greater quantity, insoluble. Through suitable treatment, an organic acid was separated, which bears some resemblance to chrysophanic acid. This acid, gymneminic acid, possesses the property of the drug, and constitutes, combined with an undetermined base, about 6 per cent. of the leaves.—*Phar. Record*, Aug. 1st, 1887.

Treatment of Gummatous Infiltrations.

Cardone recommends injections of corrosive sublimate into the bases of the infiltrations. He has treated in this way three patients with tertiary syphilis, with very good results. A girl, thirteen years old, who had a gumma at the root of the tongue, received three injections of corrosive sublimate in three days, when the infiltration shrank and in a few days entirely disappeared. In another patient, a gumma on the point of the nose, for which iodide of potash had been long unsuccessfully given, disappeared after four injections. In a case of multiple gummata, a large gumma disappeared in a short time after six deep-seated injections, while the others, which were not treated in this way, broke down and formed large ulcers.—*La Riforma med.—Allgemeine med. Central-Zeitung*, September 3, 1887.

Injections of Quinine in Gonorrhœa.

Dr. Ledetsch states that he has been able to cure some chronic cases of gonorrhœa in a few days by using the following injection:

℞ Quin. bisulph.....gr. xv
Glycerini.....f℥vii
Aquæ destil.....f℥iiss

M.—To be used at first three times a day, then twice a day, and subsequently only once a day.

Except a slight burning, this solution has no unpleasant results.—*Prager med. Wochenschr., No. 32*, 1887.

Chloride of Zinc in Gonorrhœal Vaginitis.

Fritsch recommends chloride of zinc as a remedy that has given him surprisingly good results. He prescribes chloride of zinc and water in equal parts, and adds of this 100 per cent. chloride of zinc solution five drachms to one and three-fourths pints of water. This injection, at a temperature of about 100° F., is given to the patient when she is lying down, twice daily, even during menstruation. Generally after ten injections the discharge subsides. Of course it returns in cases in which the cervix, endometrium and tubes are affected. Then the cavity of the uterus is cauterized with a strong solution of chloride of zinc and an iodoform tampon applied. Without claiming to have completely cured gonorrhœa, this method gave him such good results that he felt it to be his duty to recommend it to his associates.—*Allgemine med. Central-Zeitung*, August 6th, 1887.

A Large Nasal Stone.

Dr. Nolte reports to the *Allgemeine med. Central-Zeitung*, August 20, 1887, the following case:

At the beginning of August of this year, a woman forty years old came to him suffering from great fetor of the breath, and saying that she had a sore mouth. An examination disclosed a foreign body projecting into the mouth from the junction of the hard with the soft palate. From its hardness, and from the sound it gave when touched, a stone was suspected. This, from its weight and rough surface had gradually forced its way from the posterior nares through the hard palate. The patient had been aware of a peculiar, indescribable feeling for two years.

A slight incision was sufficient to remove the stone, which, on chemical examination, was found to consist of phosphate of lime, carbonate of lime, ammonia, magnesic phosphate; iron, potash and sodium in traces, and dried nasal mucus.

A Case of Suppurative Pylephlebitis Arising as an Acute Affection from the Mucous Membrane of the Stomach.

S. Laache reports the following case to the *Central. f. Klin. Med.*, No. 47, 1886:

A young student, twenty-four years old, who had previously enjoyed good health, was taken sick after swallowing some ice water, with chills, bilious vomiting, diarrhœa and fever. He had a moderate amount of jaundice, and repeated epistaxis. The liver was enlarged, the region of the gall-bladder tender, the spleen of normal size, and the urine contained bile pigment. Copious vomiting was continuous, finally becoming very black, and consisting of a sour-smelling fluid. The patient succumbed after an illness of about fourteen days.

At the autopsy, a thrombus in a state of softening, was found occupying the portal vein, and in the liver, numerous abscesses of different sizes. The epithelium of the mucous membrane of the stomach was peeled off, especially along the greater curvature. A thrombus completely plugged the gastro-epiploic vein. In the lower part of the ileum was a spot resembling the altered mucous membrane of the stomach, but no thrombi were found in the neighboring veins.

In the thrombi and in the abscesses of the liver, numerous very small diplococci, and slender, tolerably long bacilli, were discovered. By inoculation of pure cultures of these bacteria in rabbits, small abscesses were produced.

It must be considered probable, that in the present case an infection had occurred through the abraded mucous membrane of the stomach, and that the loss of substance in the latter had been effected by the ice water.—*Centralblatt f. d. med. Wissensch.*, September 3, 1887.

Aneurism and Atheroma of the Aorta in Childhood.

Sanné, in the course of a paper in *Rev. Mens. des Malad. de L'enf.*, February, 1887, says: That diseases of the large vessels, particularly aneurism, belong to the very rarest occurrences of childhood. But that immunity is not absolute, is proved by several contributions to the subject, of which the author cites four. In the first case a child, otherwise well developed, was still-born in a breech position, and at the autopsy Phænomenow found an aneurism of the abdominal aorta (Vid: *Arch. f. Gyn.*, 1882). In the second case (*Bull. de la Soc. Méd. des hôp. de Paris*, 1863, p. 499), Roger contributes the history of a boy, ten years old, in which all the clinical symptoms pointed to the presence of an aneurism of the arch of the aorta. The later fate of the patient is not given. The third case is one observed by Sanné himself. He had diagnosed dilatation of the aorta and insufficiency of the semi-lunar valves, in a boy thirteen and-a-half years old. At the autopsy there was found considerable widening of the ascending arch of the aorta, and on the inner surface of the artery, changes indicative of endarteritis deformans; while on the convex side of the descending aorta, at its upper part, was an aneurism the size of a hazel-nut. The inner side of the sac was lined with calcareous plates; the aortic valves were thickened and likewise infiltrated with lime. The fourth case was reported by Moutard-Martin (*Bull. de la Société anatomique*, 1875, p. 775), and illustrates the earliest stage of the formation of aneurism. A boy, two years old, died with symptoms of endo and pericarditis. At the autopsy, besides the recent diseases, there were found superficial, yellowish white elevations upon the inner surface of the intima at the origin of the aorta, as they occur in the earlier stages of endarteritis.

From these reports it is evident that aneurisms of the aorta are found in children at all ages, and even during intra-uterine life. Moreover, neither anatomical nor clinical

differences are to be observed in the phenomena as they occur in infancy and in adult life. The point of origin, also, is the same, and so is the cause, namely, an endarteritis. The presence or absence of syphilis does not seem to have been stated.—*Centralblatt f. d. Med. Wissensch.*, September 3, 1887.

The Methods of Treatment of Prostatitis, with Especial Reference to Hypertrophy of the Prostate.

In this book, which has been recently published at Leipsic, Dr. Leopold Fischer, after a short account of the different forms of prostatitis, gives a thoughtful summary of all the useful methods of treatment. In the acute form, he rejects the treatment by local abstraction of blood recommended by Thompson and Pauli, as in the long run useless; and decides for the local application of cold, in the form of poultices, ice-bags or washings. For the after-treatment, in order to avoid subsequent hypertrophy, he recommends, besides a dietetic regimen, the use of a douche, as especially successful, even in chronic prostatic hypertrophy. For this purpose, the apparatus devised by Von Nussbaum may be used. This consists in a contrivance by means of which a jet or spray of water can be thrown upon the perineum as the patient sits upon a commode. This douche should be continued some time, and used several times a day, the temperature of the water being from 77°–95° F. With reference to the much-used dilatation of the urethra, the author thinks that, if practiced gently and for a short time, it is of slight benefit, but practiced roughly and for a long time it is decidedly dangerous. If there should be marked retention of urine with catheterismus, the suprapubic puncture of the bladder should be preferred to all other methods, and Nélaton's catheter introduced and allowed to stay in.—*Deutsche Medizinal-Zeitung*, September 5, 1887.

Book Reviews.

Surgery: its Theory and Practice. By William Johnson Walsham, F.R.C.S., Assistant Surgeon to St. Bartholomew's Hospital, etc. With 236 illustrations. 8vo., pp. x, 655. Philadelphia: P. Blakiston, Son & Co., 1887. Price, $3.00.

This work opens with two interesting sections on surgical pathology, which are complete enough to include that rare and imperfectly understood condition called "Raynaud's Disease," and which very fairly represent the present state of knowledge in regard to the subject. We regret to observe the simple faith with which the author repeats the common opinions of the laity in regard to hydrophobia—for example, that the discharge of viscid saliva and hallucinations are "characteristic" signs of this disorder, and his recommendation that Pasteur's inoculations for anticipated hydrophobia, and ought not to be neglected. He inclines also to the belief that tetanus is of bacterial origin, and in other respects seems to have accepted views which are not only still unproved, but improbable.

In general, the work of the author is very good. The typography of the book is excellent and the illustrations well adapted to their object, not a few of them being quite old acquaintances.

Handbook of Gynæcological Operations. By Alban H. G. Doran, F.R.C.S., Surgeon to Out-patients, Samaritan Free Hospital for Women and Children, London, etc. With illustrations. 8vo., pp. xii, 485. Philadelphia: P. Blakiston, Son & Co., 1887. Price, $4.50.

This book is devoted to surgical operations upon the genito-urinary organs of women, and omits consideration of purely therapeutic or obstetrical measures. In the department of which it treats it is a master-piece, being sensible, thorough, clear and admirably written. The illustrations, of which there are very many, are of the highest order of excellence and quite in keeping with the quality of the text. We do not hesitate to recommend it strongly to our readers.

Literary Notes and Queries.

[In this column the Reporter will publish short items of literary interest and questions addressed to this Journal or its readers, and answers to them, in regard to any literary matters: books, authors, places and prices of publications, etc.]

—*B. Westermann & Co.* announce the early publication of Dr. Robert Koch's full report of his journey to Egypt and India five years ago, to investigate the cholera for the German Government. His oldest assistant, Dr. Gaffky, has undertaken the preparation of the report. The work will contain many illustrations, among them about thirty plates. The price will be about $8.80.

—*Lea Brothers & Co.* announce that after the 1st of January the *American Journal of the Medical Sciences* will appear as a monthly instead of as a quarterly.

THE

Medical and Surgical Reporter.

A WEEKLY JOURNAL,

ISSUED EVERY SATURDAY.

N. A. RANDOLPH, M. D.,
CHARLES W. DULLES, M. D., } EDITORS.

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NERVOUS PALPITATION CURED BY CLIMBING STAIRS.

Dr. Theodore Clemens, of Frankford-on-the-Main, describes in the *All. Med. Central-Zeitung*, Sept. 10, 1887, an interesting case, in which a well-to-do man, 46 years old, came to him for electrical treatment on account of distress and irregularity in the action of his heart. Clemens, guided by the teachings of Stokes and of Œrtel, decided to make him do the thing he most dreaded, namely: climb up several flights of stairs. Much as the patient feared the result of this experiment, he made it when accompanied by his physician. The effect was most happy. The patient's pulse, which had intermitted at each tenth or twelfth beat, wavered only twice, and but slightly, in a hundred beats after he had mounted three flights of stairs twice. He now decided to make similar efforts regularly every day, and in three months he was a well man.

This method—systematic exercise for the cure of certain forms of heart disease—is abundantly deserving of consideration. Its effects ought, of course, to be carefully studied, and it cannot be pursued if it produces—as it may—aggravation of the disorder in any particular case. But there are doubtless many cases which are treated in vain with rest, and tonics, and cardiac stimulants, which would be much improved if exercise were substituted for these measures. Such hearts need to be strengthened by work, and are only weakened by being spared from it.

THE COMMUNICABILITY OF TUBERCULOSIS.

In some respects the advocates of the specific properties of the tubercle bacillus seem to be proving too much. If one could credit all that is claimed for it, the wonder would be that the human race has not long since disappeared from the face of the earth. In his recent lecture at the opening of the current term of the Jefferson Medical College, Dr. Da Costa called attention to this point: "When I see," he said, "in popular journals descriptions of the minute organisms in the water we drink, attached to the food we eat; when I hear the ingenious researches commented on that show some of the worst of them, as of the bacillus of tubercle, floating in the air of places of amusement; when in a literary monthly review of great repute I meet with an able article on the 'Creatures we Breathe,' and find that an enthusiastic observer, seated in a railway carriage, notes on the closed window of a compartment containing ten persons, upwards of three thousand organisms falling on the square foot in one minute; I wonder what fright and terror is to be induced by all this, or what will come from its constant contemplation."

To this may now be added the terror of flies. Drs. Spillman and Haushalter have recently reported to the Academy of Science, of Paris (see the last number of the REPORTER, p. 517), that they have been studying the possibility of the communication of phthisis by flies. They have noted the pertinacity with which flies cling to the cups used for

the sputa of consumptives, and have caught and investigated some of them. Such flies, they found, soon died, and in their abdomen and excrement they discovered many tubercle bacilli. After death these flies dry up and fall into dust which may spread the germs of tuberculosis everywhere. More than this, before they die such flies may deposit these germs in food or drink, by defecation, and so disperse the contagion.

This idea is far from pleasant at the best, and it would be horrible if it were not for the fact that there is no reason to believe it is well founded. Observation does not confirm any such frightful theory; and those who advocate it are—as we have remarked above—trying to prove too much. If their suppositions were correct, who would escape consumption? To explain the immunity from tuberculosis of so large a proportion of the human race by the assertion that they do not present a soil suitable for the growth and multiplication of the tubercle bacillus is to beg the question, and to forget the many cases in which inoculation of healthy subjects is said to have taken place in much less likely ways than are suggested by this fly-theory.

For the present we think it not unwise to accept the evidence of clinical experience in this matter, rather than the hypotheses founded on laboratory experiments, and to believe that neither places of amusement, nor railway carriages, nor flies need have special terrors for one of sound mind and fairly sound body.

DISINFECTION.

The occurrence at one time of cholera at the port of New York, of an unusual number of cases of typhoid fever in one district in Philadelphia, and of yellow-fever at Tampa, Florida, attracts attention to the subject of the means of preventing the spreading of these disorders. Among these means none is of greater importance than disinfection. This subject has just been under consideration by the Sixth International Congress for Hygiene and Demography, held in Vienna. At this meeting, Dr. Löffler, of Berlin, made an elaborate report on the subject of disinfection. He recommended the most scrupulous cleanliness of the patients, their animate and inanimate surroundings, of the sick-rooms and their contents; frequent and thorough renewal of the air of the room in which the sick remain; and the removal and rendering innocuous of dangerous objects. Washing in carbolized water occupies an important part in his recommendations, and steaming of clothing. The discharges o patients with infectious diseases should be received at once in vessels one-quarter full of a five per cent. solution of carbolic acid. Closets should not be used by such patients at all; but, if they are used unavoidably, the seats, as well as the pipes, should be cleaned at once with large qantities of a like solution of carbolic acid. Neither food nor drink should be kept in the sick-room, and no person should share the food used by the patient. Bad odors should be corrected by removing their cause and by ventilation. Attempts to correct them with matter having a more powerful odor can only do harm by concealing them.

Dr. Löffler recommends the most elaborate cleansing and disinfection of furniture of all sorts, including carpets and curtains, as well as all towels and articles of clothing which have been used about a patient with an infectious disease. All cheap things he would have burned, if they cannot be thoroughly disinfected. No patient should ever be transported in a vehicle—by land or water—which is used by the public; nor should he go about except after a mos thorough washing with warm water and soap, and in perfectly clean clothing.

The bodies of those who have died of cholera, small-pox, diphtheria, or typhoid fever, he thinks, should be closed up in a coffin as soon as the fact of death is discovered, without washing, and wrapped in a linen cloth soaked in a five per cent. solution of carbolic acid.

These suggestions harmonize with the general opinion of hygienists in regard to the necessity for the most painstaking efforts to prevent the spread of contagious and infec-

tious diseases. Personal experience may lead one or another medical men to doubt the necessity for certain of the details which Löffler thinks important; but in the present state of our knowledge it is best to spare no trouble, and even to do what may not be easy or pleasant in order to prevent the spreading of diseases which sometimes makes such fearful ravages. Whenever they make their appearance the good of the community is at stake, and personal opinions or wishes must give way to what the most careful students of public health think desirable.

It is to be hoped that our country may long be spared from any widespread epidemic; but this seems now to be attainable only by a wise observation of such preventive measures as we have cited above.

Notes and Comments.

Report of a Case of Biliary Calculi With Absence of Gall-Bladder.

Dr. Tinsley Brown, M. D., Hamilton, Mo., reports the following case in the transactions of the Medical Association of Missouri, 1887:

I was called on May 19th, 1882, to see Mr. G. G., aged forty-two, who was suffering from an attack of gall-stone impaction. The attack was made manifest by severe pain, chill and persistent vomiting, and followed by extreme jaundice. The pain was relieved by the inhalation of chloroform and hypodermic injections of morphine. The patient was confined to his bed for a week, and did not fully recover for six or eight weeks. There was a history of a previous attack about six years before. His father died at an advanced age from biliary colic and some sort of obstruction of the bowels. His whole family was of a bilious temperament. After the pain was relieved, his after-treatment was by laxatives and alkalies, the principal remedy being phosphate of soda. The patient remained in a fair state of health for three years and a half, when he again began to have attacks of biliary colic. By washing the discharge from the bowels after one of these attacks, I found pieces of biliary calculi. All medical treatment failed to keep off his attacks for any length of time. Over-work, or going past meal-time without eating, would bring on his paroxysms. In January of this year he started to New York on some business, going to Chicago first with some stock. He was taken sick on the way, and was confined to bed a great portion of his time while away from home, which was about three weeks. At one time he vomited material which had a fæcal odor.

In one week after returning home, he was taken violently ill, with severe pain and uncontrollable vomiting. This was followed by a temperature of 103°. I could at no time detect the gall-bladder. The area of hepatic dullness was normal, and the bowels were constipated. He, at all times when sick with this trouble, had had more or less trouble in passing his urine, perhaps from the use of morphine. Morphine and chloroform relieved the pain, but he still vomited.

In fourteen hours he had a violent chill, requiring one or two persons to hold him in bed. After this, there was much fever; pulse 130, and irregular. In twelve hours he was apparently pulseless, and vomiting continually. On one or two occasions the material vomited emitted a fæcal odor. In forty-eight hours his pulse had become better, and vomiting less. We then entertained great hope of his recovery, but his favorable symptoms soon failed, and he died on the eighth day of his illness.

Post-mortem fourteen hours after death.—Much emaciation, skin and adipose tissue extremely jaundiced. The liver was found to be of normal size. Only slight signs of any recent peritonitis in the region of the common bile duct. Stomach contained some mucus, but was not inflamed; no stricture of the pylorus, but a slight stricture of the duodenum existed at the entrance of the bile duct; signs of old inflammation around the common bile duct, which was sacculated somewhat like a bubble blown on a glass tube, to the extent of one-half inch, or more. The gall-bladder was entirely absent, there being no trace of it, save the sacculated place in the bile duct. The common bile duct contained four calculi, weighing respectively 22, 23, 25 and 29 grains. There was complete occlusion of the duct at its orifice, caused by impaction of one of the calculi. The gall-bladder probably had been destroyed a number of years before, if it ever had existed, as there were no signs of it.

Surgical Instruction to Railroad Conductors.

As railroads multiply and their equipment is perfected and their service made more methodical, more and more attention is paid to the care of injured persons. All railroads now have regular division surgeons and many have surgeons-in-chief. In cases of

accident between stations considerable time frequently elapses before a surgeon's services can be secured. To prevent serious consequences from the exposure of the patient's wounds, or loss of blood, many railroad companies provide for every train a box containing surgical dressings and simple appliances with printed directions to be followed in case of emergency till the arrival of the surgeon.

In the majority of instances these means will be found, we believe, of but trifling advantage in the absence of persons skilled, to some extent, in meeting such emergencies. To fulfill this requirement also, attempts have been made to furnish instruction to trainmen by means of an annual lecture, so that they might be competent to supply temporary relief to the injured. Such means will be altogether inefficient to render a man who is otherwise without surgical skill or training, capable to check hemorrhage, antiseptically occlude a wound or splint a broken bone.

These are the most important duties which would devolve on the *pro tempore* surgeons, and they *cannot be taught by lectures alone*, especially to an indiscriminate and volunteer audience. Probably the most practicable plan would be to have the necessary (and only the necessary) instruction given to all conductors and to have this course of instruction laid down in a manual, which should be for the double purpose of defining the duties of the conductor, in cases of personal injury, till the arrival of the surgeon, and of refreshing the memory of the former in case of need. The indiscriminate use of apparently harmless appliances have often followed by disaster, especially the application of the field tourniquet and elastic bandage, both of which in the hands of the unskilled are capable of causing irreparable damage. A brief but painstaking course of personal instruction by railroad surgeons to train conductors in emergency practice, teaching them not only how to do good, but what is more important, how to avoid doing harm, would be a valuable addition to railroad service; but to be efficient it must have been the sanction of the management, and become part of the duty both of surgeons and train conductors.—*Pittsburgh Med. Review*, August 30, 1887.

Immediate Relief for Lumbago.

Dr. Burggraeve recommends painting the painful parts with the following:

℞ Tr. iodinii,
Collodii,
Aq. ammoniæ.....āā fʒss
M.

An Error in Diagnosis.

Dr. F. Bradnack tells the following amusing story: It is not often that even a layman commits so curious an error in diagnosis as the one I am about to relate. A young man of twenty consulted me, complaining that he was suffering from "the itch." Upon questioning him as to how he contracted it he replied that some weeks before he had slept in the same bed with a man who had had the itch for some time. After this history I physically examined him—not only his hands, but his entire body. At the conclusion of my examination, he inquired: "Well, doctor, I suppose this disease *could* be taken by sleeping with a man, could it not?" Whereupon I replied: "The disease which you have could, in my opinion, only be taken by sleeping with a woman!" At this reply he at first appeared greatly astonished, but after some hesitation confessed that about two months before he had, on one unlucky night, made his first entrance into a house of ill-fame.

What I found in examining him was a well-pronounced Hunterian chancre, with marked induration of the inguinal glands on both sides, together with a squamous syphilide not only on the hands, but *nearly all over* the body. This (due to the fact that it at times itched slightly) he had concluded was "the itch." Until very recently he had not noticed either the chancre or the indurated inguinal glands.

He had consulted a quack, who, after charging him nothing for treatment, but $5.00 apiece for two bottles of "medicine" (?), frankly confessed that "it was hard to say what was the matter with him."

This patient is now upon a vigorous anti-syphilitic treatment, and may, meantime, for a year or two, console himself with the poetic and philosophic reflection that "to err is human"—not only in the field of morals, but likewise in the even more difficult field of medical diagnosis.—*The Med. Press* (*N. Y.*), September, 1887.

Distillery Swill as a Food for Milch-Cows.

Mr. Charles Cabanne writes as follows in *Science* of August 5, 1887:

Some eighteen years ago I owned a dairy, and run on one thousand acres of land eight hundred cows. I had one stable that held 672 cows; it was kept clean, and was well ventilated. For eighteen months I fed distillery-swill. From my experience in feeding swill to milch-cows, I should say that it produces tuberculosis. In addition to swill,

I fed grass and hay, and during the summer months "soiled." At the expiration of eighteen months I stopped feeding swill, and the number of cows that had to be disposed of because they had consumption was reduced to so few, that I do not now remember that there were any. It is my opinion that if cows are closely confined and fed on swill and hay exclusively, tuberculosis will develop in nine cows out of every ten inside of a year. The nutritive quality of swill food depends upon the amount of water put upon the grains after fermentation. I have never had any practical experience in feeding sweet distillery swill; but if fed in moderate quantities, not too hot and sweet, and with hay and other dry and very nutritious food, I can see no reason why it should be harmful. Parties who produce swill-milk for sale in large cities find swill to be the cheapest food for the production of milk, and consequently use it to excess. I have never seen swill fed sweet in more than one city dairy, and I have been in fifty.

The Usefulness of Terebene in Diseases of the Lungs.

Dr. D. M. Cammann, of New York, has been using terebene largely in diseases of the lungs. He sums up the results he has obtained from its use, as follows:

An analysis of the histories of eighteen cases shows that eight were emphysema, six bronchitis, three phthisis, and one asthma and bronchitis. Two cases of bronchitis, one of which had lasted for a few days, and the other for a month, were cured. Three cases of chronic bronchitis showed great improvement. One case showed no improvement after taking ten drops of terebene every four hours for five days. In this case the treatment was subsequently changed several times without any improvement occurring in the patient's condition. Seven of the cases of emphysema improved, and most of them to a marked degree. One case was unimproved after taking the medicine for two months. The three cases of phthisis and the case of asthma all improved. The time that the cases were treated varied from a few days to five months. The average length of treatment was fifty-five days. The terebene was given either dropped on sugar or in a mucilaginous mixture, in doses of from ten to fifteen minims, three or four times daily, and occasionally more frequently. In nearly every case the terebene was given without any other drug. Of these eighteen cases only two, or one in nine, were unimproved. In the other cases the dyspnœa was diminished, and usually to a marked degree. In fact, dyspnœa was the symptom upon which terebene seemed to have the most uniform and favorable results. The expectoration was thinner and lessened in quantity. In eight out of sixteen cases the patients said that the urine was increased; in the other eight cases they had noticed no change. In two cases vomiting occurred, but it was after eating or coughing, and the patients themselves did not attribute it to the medicine. In two cases hæmoptysis ceased a short time after taking the terebene. I regret that it has been possible for me to use it in only two cases of hemorrhage, as the result was so favorable as to warrant its further trial.

Terebene in some of its effects resembles turpentine, but is less irritating. In one case a patient took by mistake a teaspoonful every four hours for a week without any unfavorable result (Murrell). In none of my cases were the bowels affected. In those in which the urine was increased, no signs of extreme irritation followed, even when the drug was used for several months.

In addition to the cases already mentioned I have used terebene in forty or more cases in which histories have not been kept, but in which the results were equally favorable.

The cases reported in this paper are not, perhaps, a sufficient number from which to draw general conclusions, but taken in connection with those already reported it may be said that we have in terebene a valuable drug. It is useful in acute cases, and in chronic cases of emphysema it seems especially beneficial in relieving the dyspnœa.—*Medical Record*, Oct. 8, 1887.

Removal of Needles from the Heart.

The *Centrai. f. Chirurgie* contains the following account of a case of Stetzner's, which was communicated to the German Surgical Society:

A student, after a spree, sought to commit suicide by driving a sewing needle into his heart. Twelve hours after the introduction of the needle the first serious symptoms made their appearance. He then had pain in the cardiac region, difficulty in breathing, and a loud pericardial murmur at the apex. After thirty-six hours the symptoms became so very serious that an operation for the removal of the foreign body was determined upon. No trace of the needle being found either under the skin or in the intercostal space, a piece of the fifth rib was resected, thus

opening up the left pleural cavity; then the pericardium was opened up, and about a teaspoonful of cloudy pericardial fluid ran out, and now the needle could be felt lying diagonally in the right ventricle. They succeeded in driving its head out through the anterior wall of the heart, and then fixing it in this position with the finger-nail. The irregular and violent beating of the heart made it very difficult to catch the foreign body with the forceps, and, in attempting it, it again slipped into the ventricle, but this time assuming a vertical instead of a diagonal position, rendering it impossible to make any further attempt at its removal; and besides this, an iodoform tampon, used to block up the hole into the pleural cavity, was drawn into the cavity by a very deep inspiratory effort. The tampon could not be found again. The wound was thoroughly tamponed, and the patient recovered in four weeks, although in the meantime he had suffered from a severe pneumo-thorax, with copious exudation. At present the patient enjoys good health, and feels no effects from his escapade. There is neither heart murmur nor abnormal pulse, nor any trace whatever of the pleural exudation. Where the needle now is, is, of course, mere matter of speculation; it may be in the heart, or it may have gone on into the mediastinum.

Dr. Iver Hardt has collected together, out of medical literature, twenty-two cases of needle in the heart, of which nineteen were found accidentally on making autopsies. In three cases the needles had been driven into the heart accidentally, and penetrated such a short distance that they were easily extracted.

No case similar to the present, in which the heart has been laid bare by splitting the pericardium, is mentioned in medical literature.

In the discussion upon the paper, Hahn, of Berlin, showed the half of a knitting needle which V. Bergmann had removed from the heart of a girl eleven years of age. It had been driven into her breast by a blow from a slipper. The patient suffered immediately from asphyxia, and was removed to the hospital. Under the left third rib, between the parasternal and mammillary lines, a black point could be seen, which was felt to be the end of the needle. There was a blowing, systolic murmur at the apex. As the needle was slowly withdrawn, it was seen to have a distinctly pendulum movement. Immediately after the extraction, the previously very rapid pulse sank to ninety per minute. The needle was withdrawn very slowly, in order to give time for a clot to form in the punctured wound, and thus avoid hemorrhage into the pericardial sack, which, in some cases of punctured wound of the heart, has been the cause of death. Von Bergmann said that he thought there could be no doubt in this case of the puncture of the heart muscle by the needle, because the murmur changed in character while the needle was being withdrawn, and, when completely removed, the murmur ceased entirely. —*Pacific Med. & Surg. Journal*, September, 1887.

The Toxic Effects of Iodoform, Cutaneous and Systemic.

Dr. R. W. Taylor, Surgeon to the Charity Hospital, New York city, read a paper on this subject before the American Dermatological Association, at its eleventh annual meeting. The following is a summary of his conclusions:

A. Its use as indicated: 1. On fresh wounds.

2. On diseased surfaces—gangrenous, chancroidal, phagedenic, syphilitic, tuberculous—and on those slow to take on healthy granulation.

3. On the surface of necrosed bone.

B. Its use is contra-indicated: 1. On freshly cut bone.

2. On granulating surfaces.

3. In cases in which it is known or is found to produce toxic effects.

C. Modes of use: 1. It should be dusted on the surface lightly and sparingly.

2. In wound-cavities or in the natural cavities as small a quantity as possible should be employed; in the former it is preferable to use it in the form of gauze.

3 It should never be rubbed in with the finger.

4. Its application should be renewed as infrequently as possible.

5. Such aids to absorption as tightly fitting bandages and impermeable dressings should not be used.

6. Its use should be discontinued as soon as healthy granulations appear.

7. It should not be used coincidently with any other antiseptics, carbolic acid especially (Mosetig-Moorhof).

8. It should be used with great caution in the young and the old; in anæmic and neurotic persons, and those suffering from weak heart or Bright's disease; also in very fat and flabby subjects.

9. Should toxic symptoms appear, the iodoform dressing must be promptly and thoroughly removed.

D. The occurrence of anomalous forms of persistent or recurrent eczema in persons who handle or in any way come in contact with the drug, or who use it as an ointment or in suppositories in the vagina or rectum, should cause the physician to suspect the agent as the possible cause.

E. It is most important that the practitioner should exercise a watchful care over all patients for whom he prescribes this agent, and should he observe morbid symptoms, however mild, pointing to the brain, heart, or lungs, or a tendency to loss of appetite or emaciation, he should cause the discontinuance of its use at once.

F. The treatment of the skin manifestations is similar in all respects to that of the simple eruptions of the same varieties. Systemic poisoning should be treated symptomatically, since we have no specific.—*N. Y. Med. Journal*, Oct. 1, 1887.

Apomorphia in Respiratory Diseases.

Dr. Reynold W. Wilcox, Instructor in Clinical Medicine at the New York Post-Graduate Medical School, Physician to the Demilt Dispensary, has the following communication in the *St. Louis Med. and Surgical Journal*, October, 1887:

In 1884, I began to use apomorphia in diseases of the respiratory organs. As my clinic at the Demilt Dispensary is a general medical one of nearly two thousand new patients each year, I have had abundant opportunity to watch the action of the drug by itself and in contrast with that of similar drugs.

Physiological experiments show that apomorphia produces no depression; if injected into the veins or given hypodermically it produces vomiting as freely after as before section of the pneumogastric; it increases the secretion from the respiratory mucous membrane, producing a thin watery mucous; diminishes somewhat the vascularity of the bronchial mucous membrane; it stimulates the respiratory center, thus increasing the number of respirations. When old solutions of a markedly green color, or large quantities are given, we get great prostration, as shown by rise of pulse and fall of temperature, depression of the respiratory center, causing slow and shallow respiration. In Carville's case three-tenths of a grain caused collapse in an adult. Therapeutically, I have used apomorphia chiefly in acute bronchitis. In those cases with considerable frontal headache, hot, dry skin, sore throat, marked prostration, rapid pulse, high temperature, stuffy feeling in chest and soreness in epigastrium, dry teasing cough; when physical examination shows harsh respiration, sonorous and sibilant râles with few coarse and fine mucous râles, are its effects most marked. Here, if one thirty-second to a forty-eighth of a grain be given every two or three hours (for the dose must be frequent, since the effect does not last a long time) one finds the headache relieved, the sore throat disappear, pulse and temperature fall, the cough markedly diminish in frequency and a copious watery expectoration, easily raised, coughed up; the respiration becomes softer, the dry râles disappear and many moist râles are heard. The first daily dose of the apomorphia mixture is taken upon awakening in the morning; resting quietly in bed for a few minutes, a glass of warm milk is taken; in a short time a full breath is followed by a series of coughs by which the night's accumulation of mucus is dislodged and expectorated. Generally there is very little coughing during the day.

The prescription, which may be varied according to each case, is:

℞ Apomorphinæ.....gr. ss ad j
Potassii bromidi.....℥ss
Tincturæ sanguinariæ.....℥j
Syrupi tolutani q. s. ad.....f℥iv
M. et ft. sol.
S.—Teaspoonful every two or three hours in a wineglass of water.

The sanguinaria is added for the benefit of the apothecary, showing him that it is a cough mixture; otherwise he would alarm the patient by telling him that it was an emetic,—a circumstance that has happened more than once.

This prescription, modified according to circumstances, can be used in pneumonia, phthisis, chronic bronchitis and spasmodic laryngitis. It is said that this drug is also useful as a spray in relieving the dry throat of phthisis. Failures will occur in the use of apomorphia, as with any other drug, but I have found it to be due to the use of old specimens or of those solutions which have become decomposed and show quite green.

—Dr. E. D. Mapother reports in the *Medical Press and Circular*, September 28, 1887, a case of elephantiasis of the leg, in a woman eighty years old, which he thinks was due to the fact that she has been obliged, for the past seven years, to occupy the sitting posture, on account of rheumatic stiffening of the hip and knee joints.

CORRESPONDENCE.

Some Results of a Long Experience.

EDS. MED. AND SURG. REPORTER:

Sirs:—In compliance with your request for the chatty communications of physicians, I send you a few points drawn from my experience, which may be useful to some of your readers:

Cure for Rattlesnake Bite.—The Hon. George Vandyke, Mayor of the city of New York, during the late war told me that wet pulverized indigo was a sure and certain cure for the bite of this reptile. I mentioned this to a lady about to start to Florida in February last, who had occasion to use it. Their colored man was bitten above the ankle. He tied a bandage tightly above the ankle, and kept on with his work. When he returned in the afternoon the foot and leg, to the bandage, were swollen dreadfully. Indigo was applied as a poultice, and the man recovered without other treatment for twenty-four hours.

Venesection in Pneumonia.—Long and continued sickness prevented my supporting Dr. Corson at the time of his advocacy of blood-letting in the treatment of acute pneumonia with my experience, confirming the value of that practice. I do not recollect an instance of failure in a large practice in pneumonia, pleurisy or peritonitis, when venesection was employed early—there being early convalescence in all cases. I have no doubt that some congested brains, which were noticed in their premonitory symptoms, would have been relieved and life comfortably prolonged had venesection been resorted to at that early stage, or had a few teaspoonful doses of chloroform been given.

Ringworm disappears rapidly with inunction, night and morning, of an ointment of tobacco, 20 grains to the ounce.

Tetanus I think can be readily cured with strychnine, given every three hours until the dose which produces a little twitching in the arms is exhibited, then to be kept up every six hours. I was interested with a friend in eight successive cases which I published, in his name, as he suggested the remedy. The late Dr. Valentine Mott, after seeing with me a case which ended in death, said: That if ever he was called again to a case of tetanus he would use strychinine, on the principle that its general effect on all of the muscles would control the partial effect on the masseter muscles, as it did this in every case.

The history of one of my cases was as follows: My colored washer-woman, 50 years old, had opisthotonos and tonic contraction of the diaphragm. I bled her till her jaw dropped—a large wash-basin full—when I thought her dead. But blood was running, and that satisfied me. In a minute the jaw fell. I bandaged the arm and gave tartar emetic in solution, beginning with ⅛ grain and increasing ⅛ every two hours until she took four grains at one dose without nausea. She recovered and lived twenty years longer.

The eight cases referred to above were published in the *N. Y. Journal of Medicine*, November and January, 1846 and 1847. The maximum dose of strychnine I used was $\frac{1}{10}$ grain in solution every two hours, until involuntary twitching of the muscles of the extremities took place, when the masseters would relax.

I would not have reported this in your journal, but that I see no regular treatment adopted and repeated deaths reported, and never the use of this remedy.

Yours truly,

EDW. VANDERPOEL.

228 E. 68th Street, New York.

Treatment of Epistaxis.

EDS. MED. AND SURG. REPORTER:

Sirs:—After some trying experiences with troublesome cases of nose-bleed, I took a hint from the practice of a veterinary surgeon which has proved more satisfactory at my hands than plugging the anterior and posterior nares. As he treated a horse, so I treated my patient.

I took a lump of cotton, tied a thread around it, and passed it with a probe back into the nostril, holding the thread in my hand. I pushed it up so far beyond the bleeding point that the blood ran out of the front of nose, and then drew it down with the string until it covered the bleeding spot. Then the bleeding was controlled. I have used this in several cases, and it has met my needs. I give it for what it is worth, and in the hope that it may help some physician when in doubt what to do.

Yours truly, H. N. BURR.

Williamson, N. Y.

Wholesome Influence of Rocky Mountain Air.

EDS. MED. AND SURG. REPORTER:

Sirs:—Seeing the selected article, "The Rocky Mountains for Recreation," in your number for September 3d, I thought my experience in the Rockies might prove of passing interest to those of the profession

suffering from nervous prostration. I had, in 1883, an attack of chills, which in spite of antimalarial treatment, became so chronic as to last four months. When I got well of chills, I kept taking cold every time I was exposed, which, in turn, developed a chronic bronchitis. I consulted my friends near me, and getting no relief, I went to New Orleans and consulted Professor Elliot, who pronounced my trouble consumption. The cough became eventually somewhat asthmatic, and I decided to try the mountains. I went first to El Paso, Texas, and then to Socorro, New Mexico. From Socorro I went to Magdalena, New Mexico, and from Magdalena I went west in a wagon for one hundred and thirty miles. At Magdalena, I weighed one hundred and twenty-six pounds. I spent about six weeks in the mountains, or drifting from one chain to another, hunting. I slept well, and although I had an occasional spell of asthmatic coughing, I constantly improved. My appetite, which was not good when I reached the mountains, and had been variable a long while before that, began improving after a week or so, to such an extent that I could eat anything any other man could eat. I never ate so ravenously before, and could eat at one sitting what would have made two or three full meals for me at home; and strange as it may appear, I never felt as if I had eaten too much, but would feel wonderfully good after each meal. When I returned to Magdalena I weighed one hundred and forty-six pounds, and felt better than I ever felt before. My mountain experience in becoming accustomed to the rarefied air—in climbing after a time, what was at first the most inaccessible hills—in rising at break of day and shouldering my rifle and walking miles, trudging through snow, in search of deer, without suffering in any way except for something to eat, is beyond my powers of description.

Suffice it to say my cough kept all the while improving while there, and the improvement has so far been so permanent that I have been to all intents and purposes a well man ever since my return.

Yours truly, J. E. STINSON, M.D.

Montague, Texas, Sept. 12, 1887.

Persistent Priapism.

EDS. MED. AND SURG. REPORTER:

Sirs:—I wish to write about a case, and like H. C. G., I am entirely willing to leave the disposal of my communication entirely with you. My case may not be strange to others, but in an experience of thirty-six years I have not seen anything of the kind. I had a patient, 31 years old, die a few days ago from enlargement of the spleen. It was enormously hypertrophied, resting upon the pelvis and filling and distending almost the whole abdomen. The patient continued to go about town to within ten hours of his death, which was due to coma. The singular circumstance connected with the case was persistent and painful priapism for the last week of his life. After death, and up to the time of his burial, there was no relaxation of this condition. The corpus spongiosum and glans was seemingly filled by a solid coagulum. The patient's disease commenced a year ago, and painful erections often troubled him for a few hours at a time, but did not become continuous until the time spoken of.

Yours truly, A. ADY, M.D.

Muscatine, Iowa, Oct. 7, 1887.

Fluid Extract of Ergot for Incontinence of Urine in Children.

EDS. MED. AND SURG. REPORTER:

Sirs:—I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children; and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any condition of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant from one to three years old, 5 to 10 drops; and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued uninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased. Yours truly,

J. B. JOHNSON, M.D.

Washington, D. C.

Pilocarpus in Dropsy.

EDS. MED. AND SURG. REPORTER:

Sirs:—A very obstinate case of general dropsy of several months' standing, which had resisted the famous apocynum cannabinum alone, and other reputed remedies, yielded readily to the following simple treatment:

℞ Fld. ext. of pilocarpus pennatifolius..ʃ3j
Fld. ext. of apocynum cannabinum...ʃ3iij
Elixir of ginger (or simple elixir) q.s. ad. ʃ3iij

M.—S. One teaspoonful in water three or four times a day.

May I suggest to your readers to try it, and to report the results in the columns of the REPORTER?

B. FRANK HUMPHREYS, M D.

Hawkins, Tex., Sept. 22, 1887.

News and Miscellany.

Sanitary Reform in Dress.

After speaking of the failure in the past of preaching and sumptuary laws to obtain reform in dress, the *British Medical Journal*, September 17, 1887, proceeds to account for the failure of modern sanitary attacks by saying:

One of the chief factors in this entire failure is the vanity and sycophancy of civilized beings, for which dress reformers make no sufficient allowance. The most frequent cause of the invention of ugly and insanitary costumes has been the attempts made to conceal blemishes or deformities existing in persons of exalted rank, and the new fashions have spread because they were at once imitated by courtiers who thus tacitly flattered the original wearers of them. It was to hide the short stature of Louis XIV that high heels and towering perruques were introduced. The Virgin Queen patronized immense ruffs because her neck was not handsome. Short hair became fashionable in France when an accident to the King's head during a snowball fight necessitated the removal of his flowing locks. Full-bottomed wigs were invented by a French barber named Duvillier to conceal the fact that one shoulder of the Dauphin was higher than the other. Charles VII of France wore long coats to hide his ill-made legs. Henry Plantagenet, Duke of Anjou, had his shoes made with long points to screen from observation an excrescence on one foot. Crinoline was introduced by the Empress Eugénie to render her appearance when *enceinte* less noticeable.

Another reason of this failure to reform dress is a want of recognition of some laws which seem to govern both the growth of fashion and the taste of women. Fashions are almost always the result of a definite growth and natural development, and are scarcely ever the outcome of sudden inspirations of tailors or dressmakers. Those garments we attack for inelegance or uselessness can show a historical reason for every apparently meaningless peculiarity, or can give a story of forgotten use for ornaments which are really atrophied survivals from vanished needs.

Every part of the despised dress coat, for example, has a reason for its peculiarity of shape. The apparently foolish nick or slit at the junction of the collar and facings on each side dates from the time when men rode a great deal, and the coat collar must be frequently turned up and the chest buttoned closely over to meet the severity of sudden storms. A division was made on each side of the collar to permit this to be done, and the present useless slit is the survival of this very needful predecessor.

Not even the buttons which adorn the small of one's back are mere vain ornament. In about the year 1700 it began to be the custom to gather in at the waist the sack-like coat of the period. This was done by two buttons sewn on over the hips, which were attached to loops set on at the edge of the coat. Then, as waists became a permanent fashion, the loops were disused, and the buttons, instead of being discarded, were simply moved a little further back; here they attained to a new usefulness in supporting the sword-belt. Now that sword-belts are no longer worn, these two buttons seem merely a meaningless excrescence.

The very shape of the dress-coat, which has been so much and so often ridiculed, is not an arbitrary fashion, but a natural development. Starting from the ample square-skirted coat of the close of the seventeenth century, itself a development, we next find the same coat with the corners of the skirt buttoned together for convenience of riding; then the same garment with the lap-corners cut off instead of buttoned up—the swallow tail of the early years of the present century; finally by a very slight further degeneration the modern dress-coat was produced. Such is a specimen of the history of the gradual evolution of most articles of clothing, an evolution which is one explanation of the inability of sanitary reformers to produce violent evolutions in dress.

Another cause of their failure is that they take a standpoint of simple utility, and ignore the instinctive and inherited desire of the one sex to attract the other by a becoming costume. It is indeed a moot point whether the original adoption of clothing by barbaric nations was not the result merely of the desire of both sexes to attract. "The pangs of hunger and revenge once satisfied," said Carlyle, "the next care of the aboriginal savages was not comfort, but decoration. Warmth he found in the toils of the chase or amid dried leaves in his hollow shed or natural grotto; but for decoration he must have clothes." The same story is told by the discovered remains of palæolithic man. Still in this case may be found the ruddle or rouge with which his wife painted her naked body, and the necklaces, made from the teeth of fierce beasts, wherewith she adorned her hairy neck. Except such simple ornaments as these, clothing was unknown to the early

cave-dweller. Naked as his mother bore him, he chased the gigantic animals of those undegenerate days through the trackless forest, or disputed with them the possession of those caves which were the alternate lair of man and beast. You may still see this early savage in some of the excellent bone-pictures he has left, semi-upright, covered with hair, innocent of clothing, creeping up with noiseless motion to attack with his stone-tipped spear the bison, the wild horse, or the elephant.

In latter days the daughters of a nomadic race sought to render themselves attractive by adopting the trappings of the camels which were their care. As they led their charges to the water by their nose rings, the little bells the camels wore made a melodious jingle in the stillness of the desert. And in forgotten imitation of these ancient servants the stately daughters of Jerusalem came tinkling down the road, with their silver ankle-bells—the maidens of Hindostan yet wear from their nostrils a glorified and bejewelled nose-ring—the sons of the East use a sandal in which the attentive observer can still trace the tablet of undressed hide used by the camel-driver for the feet of his valuable beast.

In every age this use of dress as an ornament to attract the other sex has rendered the censure of reformers on its extravagances unavailing. When, for instance, a mania for classicism afflicted the patriots of the French Revolution, the ladies of France adopted the dresses of Greece and Rome, or what they imagined to be such, with fatal eagerness, and with undraped bodies and sandalled feet braved the severity of a Parisian winter. Their light attire exposed them to diseases of the chest; nay, to death itself, but they heeded not. The gold rings shining on their feet could not protect them from the cold of winter, yet they remained faithful to gauze-clad nudity.[1] It was vain to remonstrate with them on their insufficient clothing; with French readiness they would reply with an epigram—

> Le diamant seul doit parer
> Des attraits que blesse la laine.

In the same way no arguments of its utility or sanity are likely to induce an elderly lady to adopt the curtailed garments recommended by Dr. Jessop, if the result should be to render her an object of ridicule to man when compared with a sister dressed in the trailing garments of modern fashion.

Much may be done, much has been accomplished in the direction of sanitary clothing, but it has been by gradual and judicious reform of material, and unseen alteration of undergarments, at the suggestion of medical men, not by sudden and violent changes of fashion and interference with prejudice. Many ladies now actually wear the woven woolen vests and the flannel knickerbocker drawers recommended by Dr. Jessop. Suspenders attached to the stays replace the injurious garter, and clothed necks and shoulders have replaced, at least in the day-time, the low-necked dresses of our grandmothers.

Much remains to be done in this matter, but it must be attempted with a complete appreciation of the difficulties of the position, and with a competent knowledge of feminine laws of thought. Flowing garments, for instance, will in all probability never be forsaken, because of the superior dignity they confer on the female figure. Indeed, in our opinion, the best hope of discarding the hateful stays rests in a gradual return to the beautiful costume of Greece, for it is almost certain that while waists are accentuated, stays will be worn, but the change must take place in the natural direction of gradual development directed by competent and judicious leaders of fashion, not in that o violent and inconsiderate revolutions. Until we are sufficiently educated to accept the wise aphorism of Edward I. as our guide a complete reform of dress is very hopeless. It was that great king who said "It is impossible to add to or diminish real worth by outward apparel; the only magnificence we must seek is the magnificence of noble and heroic deeds."

[1] A fashion they carried so far as to discard chemises for one whole week.

The Manufacture of Cachets and Wafers.

The recent death of Limousin, the inventor of the wafer capsules (cachets, capsulæ amylaceæ) suggests the idea of again drawing attention to the utility of this form of medication.

In recent times, the development of the wafer-capsule industry, if it may be so called, has been especially promoted by Mr. Adolph Vomacka, of Prague.

To a certain extent, the choice of this form of medication depends somewhat upon the rate with which its existence or availability is kept before the memory of the prescriber. It only needs a slight impetus, from time to time, to cause a preference in favor of the wafer-capsule over some of the forms of medication, though it is by no means intended to assert that this is in all cases the best form. We believe, however, that it is, for instance,

preferable to gelatin capsules in the case of quinine.

Formerly, the wafer-capsules were pressed from the large square wafers (for which Nuremberg has long been celebrated); at the present time, however, they are baked specially. The cost of fitting up a factory is very small, and the arrangements required are simple, requiring but little room and only cheap labor. The most expensive item of the whole are the forms. These are made of two hinged pieces, the material being either steel or brass. One of the plates contains the concave, the other the convex pattern of the wafers.

These forms rest upon one or more specially constructed ovens heated either by gas or wood-charcoal. As soon as the opened forms, resting on the hot oven, have acquired the proper temperature, which is easily recognized by allowing a drop of water to fall upon them, a certain quantity of a mass prepared from wheat-starch is spread upon one of the plates and the other plate gradually folded over it. The latter, through its own weight, expands the mass so that it forms a perfectly uniform layer. The excess of the mass, which is squeezed out at the side, is simply scratched off. The forms are then opened, and the completely baked sheet taken out. This sheet contains as many half wafer capsules as there are patterns. When freshly taken from the form, these sheets are very brittle; but, after being laid aside a few days, they absorb enough moisture from the air to permit being cut or trimmed. The next operation then is the cutting or punching out of the round wafers. For this purpose there are used either simple punches, or punching machines worked by treadles, by means of which each separate wafer is cut out. These are then counted and put up in packages. A well trained girl is able to bake, in one day, 20,000 such wafers, and it requires the service of only two girls to punch these.

The mass of which the wafers are composed consists of the purest wheat-starch, mixed with water. The best fuel is either gas or wood-charcoal. There being only a few requisites, it will be easy to calculate the cost of a day's turn out.

The whole art and mystery of the manufacture centres in the forms, which must be absolutely true and perfect. If the forms are not exactly true, the wafers will be uneven. The least defect of the forms will be prominently visible upon the product.

The preparation of flat wafers, such as are used for making sealing wafers, sacramental wafers, wafer bottoms for ginger-cake, etc., is much more simple than that of the medicinal wafers. The former are baked in similar metallic forms, which are, however, entirely smooth inside. The thickness of the wafers depends, of course, upon the distance intervening between the plates when they are closed.—*American Druggist*, August, 1887.

Clever Detection of a Criminal by a Doctor.

A rather novel point in forensic medicine has arisen in connection with the murder at the Rue Montaigne, Paris, the victims of which were a celebrated *demimondaine* who, along with her maid and maid-servant, was found murdered in their apartments under circumstances of great cruelty. Their throats had been cut after a severe struggle, and their bedding and the walls of the apartments in their vicinity were copiously bespattered with blood. The unfortunate chief victim was the possessor of jewellery and other valuables to the extent of some thousand pounds, presumably the motive of the murder. These, however, were in an iron safe, and as the murderer, who was evidently single handed, could neither open this nor carry it away, he had to leave without the wages of his crime. The key was subsequently found concealed in a wardrobe. A man named Pranzini, a follower of the victims, was arrested upon suspicion, but the closest examination of his clothes, both those which he had worn on the evening of the crime and those found at his residence, showed no trace of blood. This was relied upon as a strong point in the defence, but Dr Brouardel, the *Médicinlégiste* engaged in the matter, recalled the fact that in the next apartment was found a toilet-stand upon which was a large basin-full of ensanguined water, as if some person stained with blood had washed therein. As none of the three victims had presented the appearance of having done this, Dr. Brouardel conceived the idea that the murderer had, on entering the apartments, undressed himself, had committed the crime in a state of nudity, had then carefully washed himself of its traces, and had finally, all being completed, resumed his clothes, of course free from all sanguineous stains. Dr. Brouardel now demanded from the *juge d'instruction* an authorization to examine Pranzini totally undressed, and on this being accomplished found a long tearing scratch (*estafilade*) extending down the front of his right thigh. Interrogated upon this, the prisoner said that he had been attacked by a severe itching in the part and had torn himself in relieving it. Being invited to

repeat the gesture he did so, scratching himself from the knee towards the body, when the medical expert showed that the tear had been produced by nails, or at all events some sharp body, acting from above downwards in the direction of the knee, as was shown by the pointed fragment of epidermis projecting upwards from the lower end of the wound. The expert's hypothesis is that when the assailant approached one of his victims, with the weapon in his right hand and with his right side next her, she inflicted the injury with her nails. Questions of blood-stains on clothing have frequently formed important evidence in murder trials; but the present is probably the first instance of an ingenious plan having been adopted to escape clothing stains, and of its being defeated by an accident developed by the acuteness of the medical expert. Pranzini was convicted, without extenuating circumstances, and was sentenced to death by the guillotine.—*Dublin Journal of Med. Science*, August, 1887.

University of Pennsylvania.

At the monthly meeting of the Board of Trustees of the University of Pennsylvania, on Monday, October 3d, Dr. Samuel G. Dixon was elected Professor of Hygiene in the Auxiliary Faculty of Medicine, in place of the late Dr. N. Archer Randolph; and Dr. A. H. P. Leuf was elected Assistant Director of Physical Education.

Medical Instinct.

Animals get rid of their parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek dark, airy places, drink water, and sometimes plunge into it. When a dog has lost his appetite, it eats that species of grass known as dog's grass, which acts as an emetic and purgative. Cats also eat grass. Sheep and cows, when ill, also seek out certain herbs. An animal suffering from chronic rheumatism always keeps, as far as possible, in the sun. The warrior ants have regularly-organized ambulances. Latrelle cut the attennæ of an ant, and other ants came and covered the wounded part with a transparent fluid secreted in their little mouths.

If a chimpanzee is wounded, it stops the bleeding by placing its hand on the wound, and dressing it with leaves or grass. When an animal has a wounded leg or arm hanging on, it completes the amputation with its teeth. A dog, on being stung on the muzzle by a viper, was observed to plunge its head repeatedly for several days in running water. The animal eventually recovered.

A sporting dog was run over by a carriage. During three weeks in winter it remained lying in a brook, where its food was taken to it. The animal recovered. A terrier hurt its right eye. It remained under a counter, avoided heat and light, although it habitually kept close to the fire. It adopted a general treatment, rest and abstinence from food. The local treatment consisted in licking the upper surface of the paw, which it applied to the wounded eye; again licking the paw when it became dry.

Animals suffering from rheumatic fever treat themselves by the continued application of cold water, which M. Delauney considers to be more certain than any of the other methods. In view of these interesting facts we are, he thinks, forced to admit that hygiene and therapeutics, as produced by animals, may, in the interest of psychology, be studied with advantage. Many physicians have been observers of animals, their diseases, and the methods adopted by them in their instinct to cure themselves, and have appropriated the knowledge so brought under their observation in their practice.—*Am. Druggist*, Aug., 1887.

Official Analysis of Beer.

The Commissioner of Internal Revenue said recently that he intends to make analytical tests of various kinds of beer sold throughout the country. The chemist of the Bureau is now getting ready to make these tests. The breweries will not be called upon for samples, but they will be bought from retail dealers in different parts of the country and sent to Washington. These tests will be made public in the interest of the people, and from the method to be followed in obtaining the samples, the brewers will not be able to render the tests nugatory by preparation.

An Argument for Vegetarians.

The heavy work of the world is not done by men who eat meat. The Roman soldiers who built such wonderful roads, and carried a weight of armor and luggage that would crush the average farm hand, lived on coarse brown bread and sour wine. They were temperate in diet, and regular in exercise. The Spanish peasant works every day and dances half the night, yet eats only his black bread, onion and watermelon. The Smyrna porter eats only a little fruit and some olives, yet he walks off with his load of a hundred pounds. The coolie, fed on rice, is more active, and can endure more than the negro fed on fat meat.

Some Quack Remedies.

Dr. Davenport, the analyst of the Massachusetts State Board of Health, states that of twenty advertised cures for the opium habit, all but one contained opium. He examined a large number of "temperance drinks," and found all to contain alcohol, and one as high as 44.3 per cent. The majority contained over 20 per cent. A preparation analyzing 41.6 per cent. was claimed by a manufacturer "to be purely a vegetable extract."

A New Port Physician.

Governor Beaver has appointed Dr. William H. Randle, of Jenkintown, physician at the port of Philadelphia, in place of Dr. Henry Leffman, whose commission expired October 1st.

Dr. Randle is a graduate of Jefferson Medical College, and is about 35 years of age. He has never held any public office. He was appointed by President Hayes to the Medical Commission which visited Memphis in 1878, during the yellow fever epidemic. The office yields about $2800 yearly.

Pills in Shells.

A correspondent sends us the following: After reading the item on page 63 of the June number, "Didn't want the pills in shells," I was reminded of a case I had some few months ago. The customer was an oldish lady who had worked herself all out on a farm, situated about a mile out, and she is one of the "fussy" kind. She came into my store just after I returned from dinner, with a prescription as follows:

℞ Salicine.....gr.xxiv
Pv. cinchona rub.....gr.xij
M.—Put into capsules No. 24.
Sig.—One before meals.

I prepared the medicine according to orders. The lady paid and went home. About five o'clock she came in all out of "wind," and asked where Dr. —— was. I informed her that he had gone out of town and wouldn't be back for several hours. "Oh, dear, what shall I do? I must see him at once!" I asked her what the trouble was, if any one was hurt? "Why," said she, "I swallowed one of those little *glass boxes* you put my medicine up in, and I am afraid it will kill me, and what *shall* I do? The doctor said he would have it fixed so I wouldn't taste it, and I thought it was pills, and so I took one and, after I swallowed it, I picked up another one, and as soon as I pinched it a little in my fingers it *all flew* to pieces, and then I found out it *was glass*. Now, why didn't you tell me to turn the medicine out of those glass boxes before taking it? But you didn't, and as I can't see very well, I have swallowed the glass and all, and you don't know how my stomach feels; it will surely kill me. Oh, what shall I do, and can't you give me something? Oh, dear, how my stomach burns and aches! You ought to be put in jail for giving people medicine in little glass boxes and calling them pills. Did you make a mistake, or did you try to kill me? Oh, dear, give me something quick, or I shall faint." I finally got her quiet, after hearing such talk as this for half an hour, and then I was able to explain what those little glass boxes were for, and what they were made of, but finally had to dissolve one to satisfy the old lady that there was no glass about them at all, and that she would not die, and that there was no harm done, etc. She replied that those were the funniest things she ever saw, and upon that she went home, feeling better. Since that time I have explained to every old lady that wanted capsules what capsules were made of, etc., before letting them go out.—*American Druggist*, August, 1887.

Yellow Fever or Dengue.

Dr. Wall, President of the Tampa (Fla.) Board of Health, telegraphed to the Marine Hospital Service on October 1st that the disease prevalent there is unquestionably yellow fever, despite a popular belief to the contrary, and that the contagion has spread to every part of the city.

The President of the Florida State Health Protective Association has telegraphed that citizens and physicians of Tampa are not satisfied that the disease is actually yellow fever, and are anxious that Dr. John Guitéras should be ordered to Tampa to determine the question.

Surgeon-General Hamilton has ordered Dr. Guitéras to Tampa as requested, and has taken steps to provide a temporary hospital and to furnish abundant supplies of disinfectants.

A Case of Purpura with Circinate Lesions.

In the October number of the *Journal of Cutaneous and Genito-Urinary Diseases*, Dr. H. W. Stelwagon reports a case of purpura with circinate lesions, which is illustrated by a very good cut. But one similar case has been recorded up to the present time—a case reported by Drs. Duhring and Van Harlingen in the Reporter, August 3, 1878.

A Drug Clerk Punished.

James A. Stewart, of Wichita, Kan., was sentenced on Sept. 22d to seventeen years and four months imprisonment in the county jail and fined $20,800, with costs of prosecution, for the violation of the Prohibition law. Stewart was a clerk in the West End drug store, and pleaded guilty to an indictment containing 2080 counts. The punishment imposed on Stewart is the heaviest ever given in the State for violation of the liquor laws.

Cinchona-Growing in Réunion.

Some time ago we reported that efforts were being made to propagate the cinchona tree in some of the French colonies, and that it was confidently assumed that these experiments would be so successful as to render French buyers independent of the London market in a few years' time.

Mr. C. L. St. John, British Consul in the French colony of Réunion, gives some interesting details of the cultivation of cinchona in that island. He states that for some years past the planting of cinchona has absorbed much attention in Réunion; and, although the plantations have hitherto assumed no very extensive development, the results obtained are sufficiently satisfactory.

At Réunion the plantations are made in forests, at a height of about 4000 feet. At this altitude, where there exist no high trees, but merely brushwood, parallel alleys from five to six feet wide are made, as far as practicable in spots sheltered from the winds. These alleys are separated by a range of brushwood, 10 feet thick on each side, which serve to protect the young cinchona plants against the violent winds so common in Réunion. Holes are then dug, at a distance of 15 feet apart, 20 inches in diameter, and the same in depth. They are then filled with the earth that has been dug up, and to which some mould is added. This mixture forms, at the surface of the soil, a convexity, into the middle of which the young cinchona plant is placed; and the alley, after a few showers of rain, is soon brought to a level.

In a soil thus prepared the young plant experiences no difficulty in its growth; but when it has attained a height of 1 foot 6 inches, care must be taken to cut the roots of the adjoining brushwood, which may have found their way into the space reserved for the cinchona, in order that the plant may meet with no impediment in the course of its development.

At the end of seven or eight years, the plants have a diameter of 3½ inches, and are ready to be worked.

The following is the manner in which the bark is prepared: Towards the month of October—that is to say, when the sap resumes its ascensive movement, and the bark is more easily detached—the plants are cut at about 2 inches from the ground. The bark is then taken off and put in the sun to dry. From the stump that remains there soon spring a great number of young shoots, which, when they have in their turn attained a certain size, should be lopped off, only leaving the number of sprigs which the stump is able to feed conveniently. These sprigs have a rapid growth, and, at the end of another period of six or eight years, a new crop is ready.

In this way the cultivation of this produce once planted, can be continued almost indefinitely, and at little expense. The consu thinks that it is evident that the means employed in Réunion for the cultivation of the cinchona are very practical, and far more economical than those in vogue in Java.

Although the Réunion plantations are as yet only on a limited scale, the results are such as to induce their extension. Hitherto, experiments have only been made by the local government on the Crown lands, and by a few wealthy planters. Lately, the Government sold a certain quantity, which brought a little more than 2 francs per lb. in the market.

The manager of the Crédit Foncier Company has also expressed great satisfaction at the results he has obtained, and he will shortly sell over 200 lbs. of cinchona planted in 1879. This year he expects to have a new crop from trees planted in 1880; and so on.

It may be stated that the stumps of the plants that were cut in October last are already covered with young shoots.—*Chem. and Druggist*, Aug. 20, 1887.

—Dr. W. T. Councilman, of Johns Hopkins University, will address the Philadelphia Pathological Society at the Semi-annual Conversational Meeting, Thursday, October 27, on "Further Investigation on the Malarial Germ of Laveran."

Members of the College of Physicians, County Medical Society and Obstetrical Society, are invited to be present.

—In a communication to the *Société de Biologie*, M. Chouppe reports success in the treatment of diarrhœa with antipyrine, in doses of fifteen grains.

Items.

—Dr. Sommer, an Hungarian physician, obtained the consent of the mayor and president of the Board of Health of New York to conduct experiments with the virus of hydrophobia upon the dogs collected by the dog-gatherers and taken to the pond. The Society for the Prevention of Cruelty to Animals have, however, interfered, and require the doctor to obtain the authority of some medical college or university in the State before they will permit him to conduct his investigations. We should think that an application, properly made, to any of the medical institutions of the city, would be followed by the granting of the requisite authority.—*Science.*

—We learn that summonses have been issued against twenty druggists in Chicago for violating the city ordinance governing the sale of liquor. One of these, Mr. Secord, has already taken out a saloon license of $500. Interesting developments are looked for, as the collector intends to enforce the ordinance, which he interprets also as prohibiting altogether the sale of "bottle goods," such as "Duffy's" and "Belle of Bourbon," without a saloon license. We have repeatedly warned druggists of impending prosecutions, and those who may be proved guilty of violations are entitled to no sympathy. The registration of sales has been much neglected of late; the legal penalty will sooner or later follow.—*The West. Druggist*, August, 1887.

—Muddy water is made clear in the following manner: Dip a filtering-paper in a solution of ferric chloride (43 per cent.), and another paper in a saturated solution of sodium carbonate, and dry. Place a piece of the ferric chloride paper in the muddy water, then a piece of the sodium carbonate paper; a precipitate of ferric carbonate is formed which clarifies the water. The water thus treated can be filtered through a funnel whose neck is filled with a piece of sponge. It will be as clear as crystal, and can be used as drinking water.—*Chem. and Drug.*, July 30, 1887.

—A writer in *Harper's Bazaar* makes a pretty close diagnosis for a layman, as to what ails the modern girl, at least a good many of her. It is well deserving of record as an *indicatio causalis* in the disease which is so often the despair of the doctor. "The modern girl hardly knows what she wants, whether it is the higher education, an æsthetic wardrobe, love or fame. She plays tennis and progressive euchre, and flirts and does Kensington work and reads Herbert Spencer, and very often writes; she dabbles in music and talks theosophy, and if there are more things in heaven and earth than are dreamed of in her philosophy one questions what they can be. Withal, she is as restless as the wind. She does not love the quiet of home; she lives on excitement; she goes to Europe, to the springs, the mountains, the theatres, the receptions, if she can get there, or to the modiste; she can always fall back upon clothes as a diversion, and, when everything else fails, she has nervous prostration and a trained nurse. In fact, the chief trouble with the modern girl, be she rich or poor, is that she either does too much, keeps her nerves on the strain, and by and by goes to the other extreme, and does literally nothing but consume drugs, talk of her ills, and consult the Christian scientists; or she has no real interests, fritters away her time in shallow pursuits, becomes pessimistic and dyspeptic, dissatisfied with herself and all the world; cries and questions if life is worth living, and feels especially blue on holidays. The remedy for all this is, perhaps, an object in life; those who are well and unselfishly occupied do not question if life is worth living; they know it is; and whether they are busy in the shoe factory, behind a counter, at the fireside, in the kitchen or the dining-room, so long as they are busy and not shirking or reaching forward for something more congenial, and neglecting present duty, their minds are at rest and uninvaded by despondency. One of the best remedies for depression of spirits is the effort to bestow happiness; it has been known to prove effectual when all other methods have failed; when novels and new gowns and cod-liver oil and bovinine and bromide; when admiration and flattery, are no more serviceable than an abracadabra or any heathen spell. Melancholy or other ills of this nature are the direct result of a too strong egotism, and an absorbing interest in others is a safe and agreeable medicine, and is usually the last thing a modern girl tries."—*Boston M. and S. Journ.*, Aug. 11th, 1887.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from Oct. 9, 1887, to Oct. 15, 1887:

Lieutenant Colonel Chas. F. Alexander, Surgeon, relieved from duty as Attending Surgeon and Examiner of Recruits at St. Louis, Mo., and ordered for duty at Ft. Meade, Dak. S.O. 235, A.G.O., Oct. 8, 1887.

Capt. F. A. Cunningham, Assistant Surgeon, died Oct. 12, 1887, at Ft. Lewis, Col.

No Changes in the Medical Corps of the Navy during the week ending Oct. 15, 1887.